

AD 638928

# NINTH MILITARY LIBRARIANS' WORKSHOP



*held at the*

UNITED STATES MILITARY ACADEMY

West Point, New York

3-5 NOVEMBER 1965

SEP 27 1966

*The Library in the Defense Establishment:  
Mutual Obligations Toward Mission Accomplishment.*

20050303266

CONFERENCE PROCEEDINGS

# NINTH MILITARY LIBRARIANS WORKSHOP

3 - 5 November 1965

Mr. Dwight C. Lyman, Chairman  
Military Librarians Division  
Special Libraries Association

ACCESSION for	
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DDC	BUFF SECTION <input type="checkbox"/>
U A REPORTED	<input type="checkbox"/>
U.S. SECTION	
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## PROGRAM COMMITTEE

Mr. Michael A. Costello, Chairman  
Picatinny Arsenal

Mr. Paul Burnette  
Army Library

Mr. Logan O. Cowgill  
Office, Chief of Engineers

Mr. W. B. Greenwood  
Coordinator of Navy Libraries

Mr. Robert L. Martin  
Natick Laboratories

Mr. Robert W. Severance  
Air University Library

Mr. Charles R. Knapp, ex-officio  
Industrial College of the Armed Forces

## HOST

Mr. Egon Weiss, Librarian  
U. S. Military Academy

*OK for public release  
under Weiss + Mr. Knapp*

*USMA -*

*9/27/66*

**PROCEEDINGS**

**Ninth Military Librarians Workshop**

**3 - 5 November 1965**

**United States Military Academy**

**West Point, New York**

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## Workshop Program

TUESDAY

2 November 1965

1300-2130	Registration	Hotel Thayer, lobby.
1900-2130	Open House. Refreshments. (No bus service to or from Hotel Thayer)	

WEDNESDAY

3 November 1965

0900-1000	Registration	USMA Library, main foyer.
1000-1015	Coffee	USMA Library, west entrance
1015-1145	Tours. The first morning is allocated to on-Post sight- seeing which includes tours of the Library, Museum, Chapels, Trophy Point, Ceme- tery, etc. Guides and trans- portation are available.	
1200-1315	Buffet luncheon	West Point Army Mess, main ballroom.
1330-1500	Welcome and orientation to the U.S. Military Academy.  1. Welcoming remarks: Maj. Gen. James B. Lampert, Superintendent.  2. The Academic Program: Brig. Gen. John R. Jannarone, Dean.  3. The Department of Tactics: Brig. Gen. Richard P. Scott, Commandant of Cadets.  4. The Admissions Program: Col. Robert S. Day, Director of Admissions and Registrar.	Thayer Hall, south auditorium.
1500-1520	Coffee	Thayer Hall, south rotunda.
1530-1630	Visits to selected curriculum supporting agencies.  1. Foreign languages labora- tories.  2. Academic computer center.  3. Television studios.  4. Training aids section.	

vj

WEDNESDAY

3 November 1965

1630-1700	Bus transportation to Hotel Thayer available at USMA Library, west entrance.	
1830-1930	Cocktails (Dutch treat)	Hotel Thayer, Bolo Room.
1930-	Dinner (informal)	Hotel Thayer.

THURSDAY

4 November 1965

0800-0830	Bus transportation to Thayer Hall available at Hotel Thayer.	
0830-1000	Topics of current interest to military librarians.  1. The Federal Library Committee: Dr. R. A. Winnacker, <i>Historian</i> , Office of the Secretary of Defense.  2. Survey of Special Libraries Serving the Federal Government: Mr. J. Williams, <i>Director</i> , Research Services Br., U.S. Office of Education.  3. The DOD-wide Scientific and Technical Vocabulary: Mr. Heston Heald, Office of the Director of Technical Information, Department of Defense.	Thayer Hall, south auditorium.
1000-1015	Coffee	Thayer Hall, south rotunda.
1015-1145	4. Army-wide Librarian Career Program: Miss Agnes Crawford, <i>Director</i> , Army Library Program, Office of The Adjutant General.  5. The New Civil Service Standards - 1410 Series: Mr. William F. Collins, <i>Chief</i> , Med & Soc Sciences Section, Standards Div. U.S. Civil Service Commission.	

THURSDAY

4 November 1965

1015-1145	6. Appraisal of ADPS Applied to Library Functions: Mr. W. A. Barden, Director, Office of Technical Liaison, Defense Documentation Center.	
1200-1315	Buffet luncheon	West Point Army Mess, main ballroom.
1330-1430	Progress and Future of the Workshop: Mr. W. B. Greenwood, Chairman, Co- ordinator, Navy Libraries.	
1430-1500	Special reports.  1. Progress on Library Presentation in STINFO Course: Miss M. L. Korke, Chief, Techni- cal Information Branch, Wright-Patterson AFB.  2. Continuation of Micro- filming Project of Military Periodicals by the Library of Congress: Dr. Vernon Tate, Chairman, Librarian, U.S. Naval Academy.	Room 104, Thayer Hall.
1500-1515	Coffee	USMA Library, third floor foyer.
1515-1630	Problems Facing Service Librarians: Delegates will join their individual Ser- vices.  DOD. Mr. O.W. Holloway, Chairman, Librarian, De- fense Supply Agency.  ARMY. Mr. L.O. Cowgill, Chairman, Chief, Scien- tific and Technical In- formation Division, Office of the Chief of Engineers.  NAVY. Miss. L.A. Morgan, Chairman, Librarian, U.S. Naval Research Laboratory.	USMA Library, room 301, 1912 seminar room.  USMA Library, room 314, audio-visual audi- torium.  USMA Library, room 212, history reading room.



THURSDAY

4 November 1965

1515-1630	AIR FORCE. Mr. Robert Severance, Chairman, Director, Air University Library.	USMA Library, room 311, south reading room.
1630-1700	Bus transportation to Hotel Thayer available at USMA Library, west entrance.	
1800-1830	Bus transportation to West Point Army Mess available at Hotel Thayer	
1830-1930	Cocktails. All participants are cordially invited.	West Point Army Mess, foyer.
1930-2130	Banquet dinner. Principal speaker is Mr. W. K. Lowry, Manager, Technical Information Libraries, Bell System Laboratories. Mr. Lowry's topic is <i>The Role of the Library in the Technical Information Program.</i>	West Point Army Mess, main ballroom.
2130-2200	Bus transportation to Hotel Thayer available at West Point Army Mess.	

FRIDAY

5 November 1965

0815-0845	Bus transportation to USMA Library available at Hotel Thayer.	
0845-1145	Round table Discussions.	USMA Library.
0845-1000	First session.	
1000-1015	Coffee.	USMA Library, third floor foyer.
1015-1145	Second session.	

**NOTE:** Delegates participate in two Round Tables. Note assignments, as previously requested, in registration folder.

FRIDAY

5 November 1965

- |           |   |  |
|-----------|---|--|
| 0845-1145 | <ol style="list-style-type: none"> <li>1. Library Facilities:<br/>Mr. Egon Weiss,<br/>Librarian, U.S.<br/>Military Academy.</li> <li>2. Bibliographic Tools,<br/>Their Use and Potential:<br/>Mrs. Nell E. Mitchell, Chief,<br/>Bibliography Section,<br/>U.S. Army War College.</li> <li>3. Criteria for Library<br/>Evaluation: Dr.<br/>Henry Voos, Chief,<br/>Technical Processes<br/>Section, Picatinny<br/>Arsenal.</li> <li>4. Semi-automatic Information Systems.               <ol style="list-style-type: none"> <li>a. ASDIR (Army Study Documentation &amp; Information Retrieval System):<br/>Mr. John J. Asaro, The<br/>Army Library, TAGO.</li> <li>b. SDI (Selective Dissemination of Information): Mrs.<br/>C. R. Hetrick,<br/>Chief Technical Librarian, Air<br/>Force Office of Scientific Research.</li> <li>c. NARDIS (Navy Automated R &amp; D Information System):<br/>Mr. Joseph L. Fuchs,<br/>Head, Technical Libraries, David<br/>Taylor Model Basin.</li> </ol> </li> <li>5. Military History: Mr.<br/>J. Thomas Russell,<br/>Chief, Special Collections Division,<br/>U. S. Military Academy<br/>Library.</li> </ol> | <p>USMA Library, room 301,<br/>1912 seminar room.</p> <p>USMA Library, room 212,<br/>history reading room.</p> <p>USMA Library, room 312,<br/>foreign languages room.</p> <p>USMA Library, room 314,<br/>audio-visual auditorium.</p> <p>USMA Library, room 411,<br/>south reading room.</p> |
| 1145-1215 | <p>Bus transportation to Hotel<br/>Thayer available at USMA<br/>Library, west entrance.</p>   |  |
| 1230-1345 | <p>Luncheon.</p>  | <p>Hotel Thayer.</p>   |
| 1400-1500 | <p>Final session, Mr. Dwight<br/>Lyman, Chairman, Chief<br/>Librarian, U.S. Navy<br/>Underwater Sound Laboratory.</p>   | <p>Hotel Thayer.</p>   |

FRIDAY

5 November 1965

1400-1500

1. Reports of Round Table  
Discussions by discussion chairmen.
2. Proposal for Establishing a Federal Librarians Division Within  
SLA: Mr. Herbert  
Holtzbaumer, Assistant  
Librarian, U.S. Department of the Interior.
3. Business meeting.
4. Good-byes.

USMA LIBRARY STAFF

*Librarian:* Mr. Egon A. Weiss

*Assistant Librarian:* Mr. William G. Kerr

*Chief, Readers' Services Division:* Miss Ann K. Harlow

*Reference Librarians:* Millicent D. Abell (Periodicals)  
Robert G. Bidwell (Science and Technology)  
Katherine deDory (Languages)  
Irene Feith (Documents)  
Michael Finkin (Social Sciences)  
Frances M. Lum (Circulation)  
John Parker (Audio-Visual)  
James E. Pearson (Military History)  
Theresa E. Taborsky (Bibliography)

*Chief, Special Collections Division:* Mr. J. Thomas Russell

*Archivists:* Mr. Joseph M. O'Donnell  
Mr. Kenneth W. Rapp

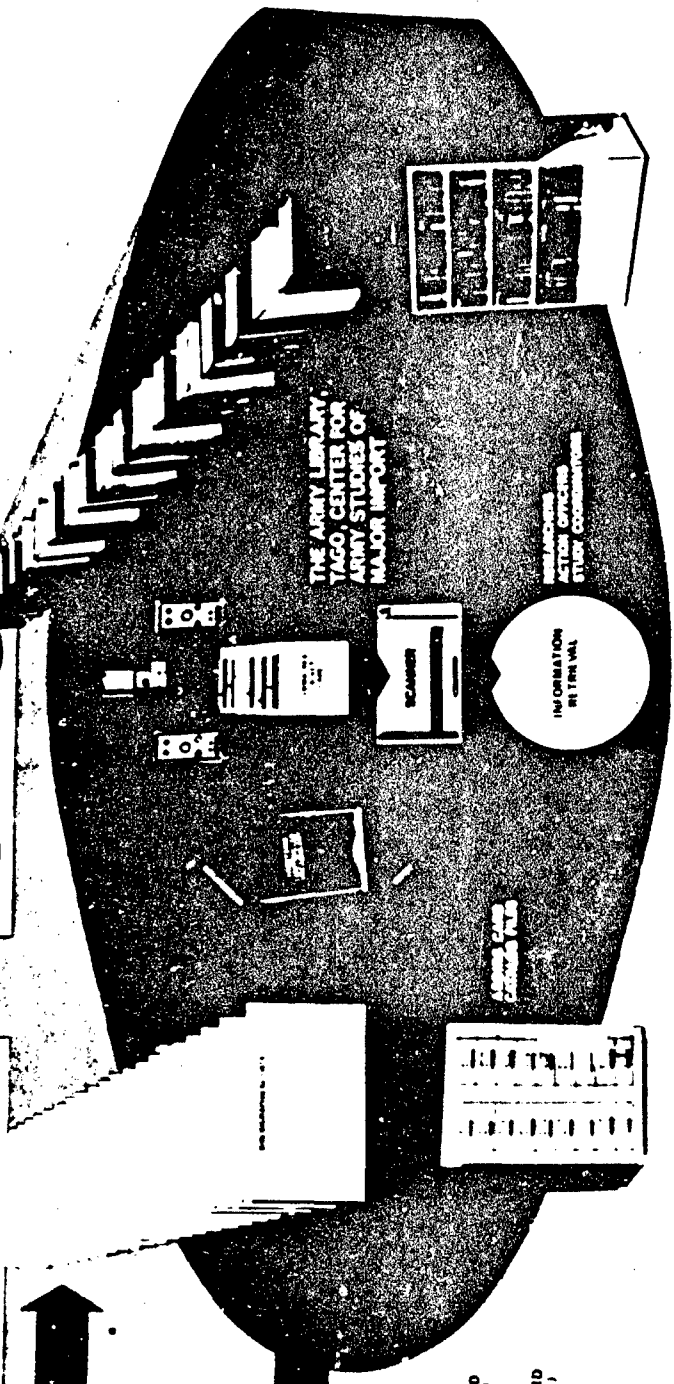
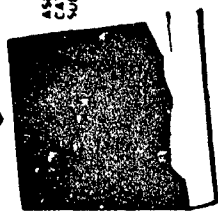
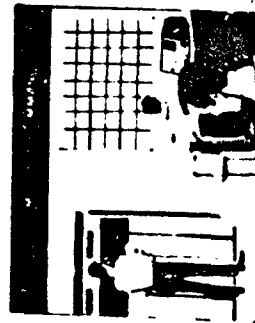
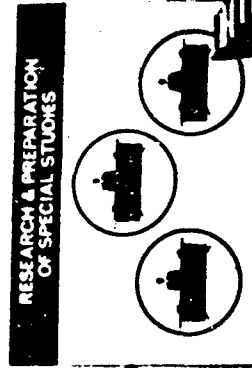
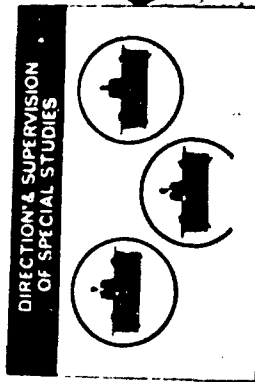
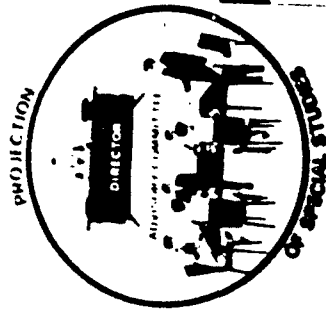
*Chief, Technical Services and Acquisitions:* Mr. James H. Conway

*Order Librarian:* Catherine McGuinn

*Catalog Librarians:* Elizabeth Dunn  
Pingkun Lee  
Anna E. Pierce  
Donna Sciascia  
Marion B. Wellar

# ASDIRS

(THE ARMY STUDY DOCUMENTATION  
& INFORMATION RETRIEVAL SYSTEM)



## ASDIRS (THE ARMY STUDY DOCUMENTATION AND INFORMATION RETRIEVAL SYSTEM)

By John J. Asero

We have here a graphic illustration of the Army Study System. It is a well coordinated system in which ASDIRS (The Army Study Documentation and Information Retrieval System) is a link in the information chain. Because of this, one can hardly talk of ASDIRS without at the same time talking about the overall system.

At the top of the picture (Projection of Special Studies) is the Directorate of Special Studies, Office of the Chief of Staff, Army, the monitoring office for the overall system. Helping the Director of Special Studies we have his staff, and the Army Study Advisory Committee (ASAC) of which he is the Chairman. The Committee is made up of general officers, each of whom represents an Army Staff agency or an Army major command. Each year the Army Staff agencies and major commands are asked to look into their needs or gaps in their special or research study effort, and to submit these requirements to the Directorate of Special Studies. These requirements are screened by a working group of ASAC, revised if necessary, priorities assigned, and the overall submitted to the Committee for approval. Once approved by ASAC, these study requirements become the Army Master Study Program for the year, which program is submitted to the Vice Chief of Staff for final approval. So much for the projection of special Army studies.

The next step in the system (Direction and Supervision of Special Studies) takes place in the staff agencies and major commands. These are the sponsoring agencies where much of the coordination and direction of the Army study effort actually occurs. Here one finds the Study Coordinators who also serve as alternate members on the Army Study Advisory Committee (or as members of the Committee if they be of general rank). They do the liaison work between the Directorate, the sponsoring or staff agencies, and the study or author agencies to whom the actual research and study effort is assigned. It is these coordinators who see to it that information is sent to the ASDIRS center, in the Army Library, as soon as a study is underway. The information comes in the form of bibliographic data sheets (see samples distributed). Too, the coordinators many times work hand-in-hand with the plans and programs officers in the staff agencies and major commands to help formulate the Army Master Study requirements, or, as alternate members of the ASAC Committee they take part in the working group of the ASAC when screening and revising the Army Master Study Program.

The actual research and preparation of the studies is done by study groups within the sponsoring or staff agencies, the major commands, or within a contract study agency such as Research Analysis Corporation, Special Research Operations Office, etc. Once a study is completed, one copy is sent to the ASDIRS Center (with updated copies of the Bibliographic Data) forming the document reference file of ASDIRS. These studies may be consulted at the ASDIRS Center, but not taken out on loan. Duplicate copies must be obtained from the author agencies or the sponsoring agencies.

The bibliographic data sheets sent to ASDIRS by the sponsoring agencies or author agencies are edited, if necessary, by the ASDIRS personnel, an ASDIRS number (a sequential accession number) is assigned to each bibliographic data sheet and the study with which it is related, after which the sheets are photographed, duplicated, reduced to 8" by 5", and filed in the ASDIRS supplementary card files. Part of the information contained on these cards (the ASDIRS control or accession number, the category number and the category itself, the title, the descriptors, and significant words of the title) is then coded and sent to the Army Information and Data Systems Command for the computer run of our indexes to the ASDIRS Bibliographic Catalog. These indexes are then assembled with the old negatives which were used to manufacture our sequential bibliographic data card file, and the overall sent to the Defense Printing Plant at the Pentagon, or to the Government Printing Office in order to print out our bibliographic, or book, catalog.

In addition, some of that same information contained in the bibliographic data cards is input into our Termatrix machine for on the spot reference to the bibliographic data files, and to the Army studies themselves. The Termatrix machine uses an optical coincidence technique in which document accession numbers are registered as holes on subject matrix cards, and the latter coordinated so that document numbers not pertinent to a specific subject can be blocked out, leaving the light to shine through only those holes or document numbers that are pertinent to the subject being researched.

Many of the users of the ASDIRS services are the same action officers, coordinators, and study authors previously mentioned. This in a way closes the information circuit of the Army Study System and provides a sort of feedback as to whether the ASDIRS Center is fulfilling its obligations, or accomplishing its mission.

The mission accomplishment of ASDIRS must be evaluated within the limitations, parameters, tolerances, or what have you, imposed on the

system by the survey report: "The Army Study System," by the Office of the Chief of Staff, Army, in 1964. It was this report which called for the establishment of an information retrieval center for Army Studies of major import. It was to be an austere system (unless justified otherwise later on) which was to start out as a pilot project with two people, become operational within six months, and be allowed to expand, if needed, to three people. It was to store only those studies which would have a significant impact on plans, policy, strategy, doctrine, materiel, or personnel in the Army as a whole -- and only one copy of each study. Also, it was to provide reference or retrieval service, and dissemination of information in the form of quarterly automated bibliographic catalogs of these Army studies so that action officers might exploit the results of these studies, while at the same time avoiding unnecessary duplication of study effort which was underway or completed.

As it now stands, ASDIRS comprises three people, a GS-12 Chief, a GS-9 Indexer, and a GS-4 Clerk. The Termatrix equipment and complementary accessories cost about six thousand dollars. The cost for producing each quarterly issue of the ASDIRS Bibliographic Catalog, about 700 copies, is circa \$1,221, or \$1.76 per copy, according to the following breakdown:

Key punching.....	\$ 36.00 (12 hrs, \$3.00 hr.)
Sorting & Converting to tape.....	40.00
Computer run.....	135.00 (15 min, \$9.00 min.)
Formatting & printout.....	30.00
Assembly & Offset printing at GPO.	980.00 (700 copies)
	<u>\$1221.00</u>

In light of the theme of this workshop: "The Library in the Defense Establishment -- Mutual Obligations Toward Mission Accomplishment," you see here, then, a fine example of a library in the Defense establishment sharing responsibilities, with part of that Defense establishment, the Army Staff, in striving toward the accomplishment of a common goal.

#### DISCUSSION

Most of the discussion centered on the mission of ASDIRS vis-a-vis that of DDC (Defense Documentation Center). It was pointed out that the mission of DDC is limited, subject-wise, like that of DLSIE (Defense Logistics Information Exchange) at Fort Lee, Va. DDC's mission is pertinent to science and technology; that of DLSIE, to logistics. The mission of ASDIRS, on the other hand, is not limited in subject scope, but is restricted, or selective, as regards the significance of the studies, or reports, to the Army as a whole. There will be an overlap



in that those logistic or scientific and technical studies which have a significant impact on plans, policy, strategy, doctrine, materiel, or personnel in the Army as a whole must also find their way into the ASDIRS Center. The same is true with personnel or manpower studies, strategic area studies, etc. As a point in reference, let us take a technical study which treats of a weapon system. A report, study, or manual which shows the mechanical workings, correct usage and maintenance, type of ammunition fired, etc. does not contain factors that would cause the study to be earmarked for ASDIRS. On the other hand, such factors as rate of fire, area coverage, casualty rate, deterioration rate, impact or change on the force structure of a combat unit in which the weapon system has been introduced, etc. would be elements of interest causing a study to be earmarked for input into ASDIRS.

BIBLIOGRAPHIC DATA (Sample)

ASDIRS No: 0001

Study Category: Management and Administration (400)      Starting Date: January 1964

Initiated By: Director of Special Studies, OCofS      Completion Date: March 1964

Study Sponsor: DC&A, CCofS      Availability Date: April 1964

Study Agency: Systems Analysis Division, DC&A, OCofS

Reference No: (none)

Title: Documentation and Information Retrieval Aspects of Army Studies

Abstract:

Eight relatively independent study programs are described. These programs are found to be documented by some seventeen different information flow mechanisms. The identified information flow mechanisms and the manner in which the programs are managed constitutes a weak "system" by documentation and information flow standards. A review of the "state of the art" of library science, documentation and information retrieval trends and experience is made to identify a range of alternative improvements. A modest pilot system, to include a central reference library with a searching aid and a periodic bibliographic publication, is proposed. Alternative follow-on improvements are cited as candidates for further research.

Time Frame: Current

Study Descriptors: Information retrieval, Studies, Bibliographies, Indexing, Documentation, Libraries, Programs

Classification: Unclassified

Contributes to: Planning, Programming,  
Budgeting

APPRAISAL OF AUTOMATIC DATA PROCESSING  
APPLIED TO LIBRARY FUNCTIONS

By William A. Barden

\* APPRAISAL OF AUTOMATIC DATA PROCESSING APPLIED TO LIBRARY FUNCTIONS

On 21 September 1964, Dr. Harold Brown, then Director of Defense Research and Engineering, wrote a memorandum to the Director, Defense Supply Agency:

"Numerous libraries within the Department of Defense use computers for some part of their library functions. Most of these have, out of necessity, designed their own system and formulated their own programs.

I believe we have now reached the point where it is essential to make the most of these advances of our military libraries. A better understanding of each effort is necessary. An overall advance in the interchange of scientific and technical information should result through greater uniformity, common practices, and improved systems for all.

It is requested that you arrange, through contractual services, to bring together, appraise, evaluate, and make recommendations for future usage of the automatic-data processing or computer programs and system designs that are in use or under development for various phases of library operations within the Department of Defense.

Under the provisions of DoD Instruction 5100.38 (paragraphs IV.F and V.A3) this undertaking is appropriately within the mission of the Defense Documentation Center (DDC). Hence, DDC should have a participating role and the contract should be funded through the DDC resources."

\* This study is performed under the direction of Mr. Walter M. Carlson, Director of Technical Information, ODDR&E. It is being monitored by Mr. Howard B. Lawson, Office of Technical Liaison, Defense Documentation Center.

As follow-on, DDC prepared specifications for a study and forwarded these to the Director, DSA, on 27 October 1964, who in turn forwarded them to DDR&E on 20 November 1964. They were approved on 25 November 1964.

On 6 January 1965, the procurement was advertised in the Commerce Business Daily and RFQ's were sent to some 90 organizations.

A bidder's briefing was held on 19 January 1965 at DDC with over 60 persons present representing at least 37 organizations. If this sounds vague, it is because someone developed a liking for one of the attendee lists being passed around and decided to take it. As a result of this briefing 32 organizations responded by submitting proposals. These were carefully evaluated and assigned a numerical rating by a screening panel of six professionally qualified persons.

Those proposals falling in the qualified category were reviewed with the DSA contracting office who awarded the contract to Booz-Allen Applied Research, Inc. (BAARINC), Bethesda, Maryland, on 13 April 1965. At the time of the award 33 libraries were to be studied. However, it was known that there would be a greater number so it was decided to write a labor-hour type of contract.

There are four phases to this contract. The first is to obtain complete information on technical libraries within the Department of Defense which use punched card equipment, punched tape equipment, or computers in some part of their function.

The second is to analyze mechanization as it has been implemented to date.

The third is to use the results of the analysis in the interest of overall improvement in the interchange of technical and scientific information through better dissemination of techniques that have been applied to date.

The fourth is a longer-term aim toward greater uniformity, more common practices and, hopefully, improved systems.

Work under the contract is conducted in three phases. These are Pilot Interviews, Collection and Analysis.

#### PILOT INTERVIEWS

Pilot Interviews were completed 12 July 1965. Four libraries were studied during this phase. They were BuShips, Ft. Detrick, Foreign

Technology Division of the Air Force Systems Command, and Harry Diamond Laboratories. At the end of the Pilot Interview phase, a preliminary report for the BuShips' Library was drafted by BAARINC and copies transmitted to DTI, ODDR&E, DDC, and the U.S. Navy Bureau of Ships for review. Drafts for the other reports were held in abeyance until comments were received on the draft of the BuShips' report.

On 13 September a meeting was held with the Director of Technical Information, ODDR&E, to brief him on the project and to obtain his comments on the BuShips' report. It was agreed at the meeting that the level of detail represented in the BuShips' report is adequate particularly as to mechanized processes, program system data, and the sample of inputs and outputs. The need for continuing the inclusion of sample inputs and outputs was strongly emphasized.

#### COLLECTION

The Collection phase began on 13 July. For the purpose of data gathering in this phase the libraries and information centers were organized into eleven areas. These areas and their scheduled periods are:

- |   |                          |
|---|--------------------------|
| 1. Boston                                   | 26 July - 13 August      |
| 2. California (San Francisco-Santa Barbara) | 26 July - 13 August      |
| 3. New York-Philadelphia                    | 30 August - 17 September |
| 4. Columbus-Dayton                          | 30 August - 17 September |
| 5. Indianapolis-Chicago                     | 4 October - 22 October   |
| 6. Ann Arbor, Michigan                      | 4 October - 22 October   |
| 7. California (San Diego-Los Angeles)       | January                  |
| 8. California (Desert)                      | January                  |
| 9. Washington, D. C.                        | 4 October - Open         |
| 10. Southeast                               | 15 November - 3 December |
| 11. Southwest                               | January - February       |

The general procedure is to send a letter requesting certain information and enclosing a copy of the interview guide to the facilities in a given area approximately four weeks prior to the visit to the area. This allows the interview teams to review material furnished by the facilities prior to the visit. During the week prior to visiting an area, more specific scheduling is arranged by telephone.

Collection of the data for each of the libraries is accomplished by means of on-site surveys performed by one of two teams. Each of the interview teams consists of a librarian and a computer system specialist. Data are generally obtained in the following ways: first, by interviews with the librarians and the computer programmers; second, by interview with management personnel where appropriate; and third, where a system is operational, by detailed examination of records, files, methods, programs, and procedures.

Data gathering will emphasize the following:

I. A profile of each library (or other information activity) in terms of its functions, identifying those which are and those which are not mechanized.

II. A description of the size and scope of the collection that has been or is to be mechanized, an assessment of the rates at which the collection changes and is used - and a description of the total potential user population as well as the active user population in each case.

III. An inventory of the equipment used or proposed to support the mechanized activities including costs, number of hours used and activities in which the equipment is used.

IV. An inventory of the program system to support the mechanized activities including:

- a. Detailed description of the files;
- b. Labor and skills required for developing, debugging, modifying, operating and maintaining computer programs;
- c. Sources and descriptions of updating information;

d. Availability of software;

e. Detailed data for each of the programs comprising the system.

An operational analysis will be conducted of the accomplishments of each library in the areas of classical library functions - acquisition, storage, retrieval, circulation and inventory - that are now or are planned to be mechanized. The ADP equipment will be related to the libraries as a whole and to those activities which have been mechanized.

Finally, a determination will be made of the ways in which mechanization has enhanced the effectiveness of the libraries' services.

Much of the information that will be required has been formally documented and is on file in the respective facilities. Other elements of information can be obtained only through the means of a personal interview with personnel who have been directly involved in the planning implementation and operation of the applications that are of interest.

Initially there were 33 facilities to be studied. There are now 75\* facilities, and it is possible that more will be added. Of the 75 facilities 19 are Army, 24 are Navy, 22 are Air Force, and 10 are DoD. At this time on-site study is completed for somewhat over half of the facilities.

Individual reports will be prepared for selected facilities. The facilities will be selected on the basis of usage of ADP or novel applications of equipments such as EAM and peek-a-boo systems. Recommendations will be provided by BAARINC to DDC who will decide which facilities will require individual reports.

In the case of those facilities for which a report will be prepared the following procedure has been adopted:

- I. Six draft copies of the facility report will be prepared and distributed - one to DTI, ODDR&E, two to DDC, one to the facility, and two are to be retained at BAARINC. It may take up to two months to complete the draft report, the major bottleneck being that the interview teams will be on the road during much of the time that the report is prepared from the team notes.

\*Organizations are listed in Enclosure.

- II. The DDC project monitor will determine the number of copies required. Two weeks will be allowed for the facility to review the report.
- III. The finished report will be delivered in one to four weeks depending on the number of pages.

## ANALYSIS

The analysis phase will begin toward the end of November. This phase will compare the various techniques used in mechanization of library functions and identify a series of typical processes for such functions. These techniques will be analyzed from the standpoint of the following:

- I. Operability
  - . Division of Labor between man and machine.
  - . Man/Machine interface simplicity.
  - . Ease and Flexibility in the file maintenance, restructuring, updating, and purging.
- II. Usefulness
  - . Availability and response.
  - . Recall.
  - . Relevance.
  - . Timeliness of Files.
  - . Reliability of equipment required in terms of down-time.
- III. Costs
  - . Operating - fixed and variable.
  - . Initial capital investment.
  - . Transition.
  - . Program maintenance.



#### IV. Transferability

- . Ease with which a technique for a given library can be transferred to other libraries.

#### V. Flexibility

- . Ease with which a technique can be utilized in solving different problems other than those for which it is designed.
- . Ease with which a technique can be adapted to similar problems of greater or lesser scope and complexity.

The results of the analysis phase will be the final report which will be organized into several parts - a part being devoted to each of such subjects as:

- . Present state-of-the-art in DoD library function mechanization.
- . Plans for future mechanization of the parts of the various libraries and information centers.
- . Various kinds of equipments and how they are utilized.

#### SOME OBSERVATIONS TO DATE

1. Cost information for developing the applications is generally not available - usually for one of more of the following reasons.

- . Time is generally available on a computer not owned by the library and the library is not generally charged for the time used.
- . Programming has been done in some cases at no cost and no records were kept. In other cases it was done by contractors who performed many services in addition to programming for the library. Thus the contractor's costs are not separable into programming cost and other services.

- . In addition, the operating costs of what was done before are not available for comparison.
- . Finally, few systems so far studied have been in full operation. Thus we have not been able to determine costs based on operation of system.

2. There is difficulty in bringing a developed system into operational use. Searchable files are useful only if a significant percentage of what is to be searched is in machine readable form. Creating the searchable files generally exceeds the resources available to the libraries. Thus most are operating with two systems - one which operated the old way using card catalogs, etc; the other being one whose capability is gradually being built over a period of a few years. These libraries can expect to be operating two systems for the next several years.

### 3. Attitudes of Higher Levels

First is the problem of attracting the right kinds of people. The following would help:

- . A national program to interest high school and college students in Library and information sciences.
- . Recognition that scientists and engineers are as necessary to information sciences as to research and development.
- . Giving people who work in information sciences status equivalent to those doing research and development particularly in the areas of salary and title.
- . Determination of qualifications on basis of unassembled examination instead of the Federal Civil Service Entrance Examination for graduates of accredited library courses or technical writing courses.

Second is the lack of standards and overall direction. Many do not wish to engage heavily in mechanization until they can have high confidence that what they do will be compatible with others and thus have a reasonably high life expectancy.

4. Most libraries do not have their own computers. Thus computer availability to the libraries tends to be erratic.

Often a library got into mechanization because the people who owned the computers had computer time and programmers available. Perhaps one shouldn't look a gift horse in the mouth, but under these circumstances we have found usually that computer usage by the library is on a second priority basis and sometimes that communication between the programmers and library staff could have been a lot better. In many cases a clear understanding of what the programmer was to do to service the library was not documented. At any rate not documented in sufficient detail.

5. Generally speaking the programs themselves tend to be simple and very much within the programming state-of-the-art. Thus most of the emphasis in getting programs to service libraries should be placed on simplifying library staff procedures in providing inputs to the computers, both in file generation and file maintenance, and in handling the outputs that the computer will provide to the library.

At present, the timetable calls for the contractor to complete the collection phase during February 1966. It is anticipated the final reports will be submitted to DDC for approval by April 1966. As soon as possible after that these reports will be announced in TAB and will be available through DDC and the Clearinghouse.

DEPARTMENT OF DEFENSE

Contained in Contract List

None

Additions by Carlson Memo

None

Later Additions

DASA Data Center  
TEMPO, General Electric Company  
735 State Street  
Santa Barbara, California

VELA Seismic Information & Analysis Center (VESIAC)  
University of Michigan  
Ann Arbor, Michigan

Ballistic Missile Radiation Analysis Center (BAMIRAC)  
University of Michigan  
Ann Arbor, Michigan

Binary Constitution Information Center  
IIT Research Institute  
10 West 35th Street  
Chicago, Illinois

Defense Metals Information Center  
Battelle Memorial Institute  
505 King Avenue  
Columbus, Ohio

Battelle-Defender Information Center (BDIC)  
Battelle Memorial Institute  
505 King Avenue  
Columbus, Ohio

Remote Area Conflict Information Center (RACIC)  
Battelle Memorial Institute  
505 King Avenue  
Columbus, Ohio

Department of Defense (Cont'd)

Defense Atomic Support Agency  
The Pentagon  
Washington 25, D. C.

Defense Industrial Supply Center  
700 Robbins Avenue  
Philadelphia, Pa.

Field Command  
Defense Atomic Support Agency  
Sandia Base,  
Albuquerque, N. M.

DEPARTMENT OF THE ARMY

Contained in Contract List

Redstone Scientific Information Center  
Redstone Arsenal, Alabama

Technical Information Branch  
Picatinny Arsenal  
Dover, New Jersey

Technical Information Division  
U. S. Army Biological Laboratories  
Fort Detrick, Frederick, Maryland

Frankford Arsenal Library  
Philadelphia 27, Pa. 19137

Dugway Proving Ground  
Dugway, Utah

Technical Information Services Office  
Benet Research & Engineering Labs  
Watervliet Arsenal  
Watervliet, New York

Technical Documents Center  
Fort Monmouth, New Jersey

Department of the Army (Cont'd)

Technical Information Office (010)  
Harry Diamond Laboratories  
Washington, D.C. 20438

U. S. Army Materials Research Agency  
Watertown, Massachusetts

Technical Library  
U. S. Army Natick Laboratories  
Natick Massachusetts

U. S. Army Combat Developments Command  
Artillery Agency  
Administrative Division  
Fort Sill, Oklahoma

Documentary Library Branch  
USA CDC CBR Agency  
U. S. Army Combat Developments Command  
Fort McClellan, Alabama

Additions by Carlson Memo

STINFO Division  
U. S. Army Research & Development Labs  
Fort Belvoir, Virginia

Plastics Technical Evaluation Center (PLASTEC)  
Picatinny Arsenal  
Dover, New Jersey 07801

Later Additions

U. S. Army Map Service  
6500 Brooks Lane  
Bethesda, Maryland

Army Logistics Management Center  
Fort Lee, Virginia

Automatic Data Fields Systems  
Design Agency  
Ft. Huachuca, Arizona

Department of the Army (Cont'd)

Non-Destructive Testing Information Service  
Watertown Arsenal  
Watertown, Massachusetts

Edgewood Arsenal  
Maryland  
(ATTN: CROL)

DEPARTMENT OF THE NAVY

Contained in Contract List

U. S. Naval Ordnance Laboratory Library  
Corona, California

Technical Library  
Naval Ordnance Laboratory  
White Oak, Maryland

Technical Information Department  
U. S. Naval Ordnance Test Station  
China Lake, California 93557

Library & Technical Information Divisions  
U. S. Naval Underwater Ordnance Station  
Newport, R. I.

Technical Library  
U. S. Naval Weapons Laboratory  
Dahlgren, Virginia

Bureau of Ships Technical Library  
18th Street & Constitution Avenue, N.W.  
Washington, D. C. 20360

Naval Applied Science Laboratory  
Technical Library  
U. S. Naval Base  
Brooklyn, New York 11251

Department of the Navy (Cont'd)

Commander, Operational Test & Evaluation Force  
U. S. Naval Station  
Norfolk, Virginia

Technical Library  
U. S. Naval Avionics Facility  
Indianapolis, Indiana 46218

Technical Library  
U. S. Naval Missile Center  
Point Mugu, California

Administrative Division  
U. S. Navy Marine Engineering Laboratory  
Annapolis, Maryland 21402

Naval Research Laboratory  
Technical Information Office  
Washington, D. C. 20390

Technical Library  
U. S. Naval Personnel Research Activity  
San Diego, California 92152

U. S. Naval Postgraduate School Library  
Monterey, California

Technical Library Division  
U. S. Naval Civil Engineering Laboratory  
Port Hueneme, California 93041

Additions by Carlson Memo

Naval Oceanographic Office Library  
Suitland, Maryland

Naval Radiological Defense Laboratory Library  
San Francisco, California

Infrared Information Agency  
University of Michigan  
Willow Run Laboratories  
Ann Arbor, Michigan 48104



Department of the Navy (Cont'd)

Later Additions

Navy Underwater Sound Laboratory  
New London, Connecticut

National Oceanographic Data Center  
M at 8th Street, S. E.  
Washington, D. C.

Technical Library Division  
U. S. Naval Ship Missiles Systems Engineering Station  
Port Hueneme, California 93041

Armed Forces Radiobiological Research Institute  
National Naval Medical Center  
Bethesda, Maryland

Chemical Propulsion Information Agency  
Johns Hopkins University Applied Physics Laboratory  
Silver Spring, Maryland

Technical Library  
Johns Hopkins University Applied Physics Laboratory  
Silver Spring, Maryland

DEPARTMENT OF THE AIR FORCE

Contained in Contract List

Library Division  
Foreign Technology Division  
Wright-Patterson AFB, Ohio

Technical Library (WLIL), AFL 2809  
Air Force Weapons Laboratory  
Kirtland AFB, New Mexico 87117

Aeromedical Library, AFL 2855  
USAF Aerospace Medical Center  
Brooks AFB, Texas 78235

Additions by Carlson Memo

Technical Library, AFL 2302  
Wright-Patterson AFB, Ohio

Department of the Air Force (Cont'd)

Technical Library, AFL 2297  
Air Force Cambridge Research Laboratory  
L. G. Hanscom Field  
Bedford, Massachusetts

Technical Library, AFL 2292  
Aeronautical Research Laboratory  
Wright-Patterson AFB, Ohio

Technical Library, AFL 7021  
Aeronautical Chart and Information Center  
2nd and Arsenal  
St. Louis 18, Missouri

Technical Library, AFL 280  
Air Force Flight Test Center  
Edwards AFB, California 93523

Later Additions

Systems Engineering Group  
Research & Technology Division  
Wright-Patterson AFB, Ohio

Air Force Materials Laboratory (MAAM)  
Wright-Patterson AFB, Ohio 45433 (Mr. H.B. Thompson)

Electrical & Electronic Properties Information Center  
Mail Station E-175  
Hughes Aircraft Company  
Culver City, California

Technical Information Systems Division  
Belfour Engineering Company  
Suttons Bay, Michigan 49682

Radiation Effects Information Center  
Battelle Memorial Institute  
505 King Avenue  
Columbus, Ohio 43201

Air Force Materials Laboratory (MAAM)  
Wright-Patterson AFB, Ohio 45433 (Mr. E. Dugger)

Department of the Air Force (Cont'd)

Thermophysical Properties Research Center  
Purdue University  
2595 Yeager Road  
West Lafayette, Indiana

Arnold Engineering Development Center  
Tullahoma, Tennessee

Ceramics & Graphite Technical Evaluation Section  
Research & Technology Division  
Wright-Patterson AFB, Ohio

Air Force Institute of Technology  
Wright-Patterson AFB, Ohio

Tactical Air Reconnaissance Center, (TAC)  
Shaw AFB, South Carolina 29152

Reliability Central  
Rome Air Development Center  
Griffiss Air Force Base, New York 13442

Reconnaissance Applications Branch  
Reconnaissance Division  
Air Force Avionics Laboratory  
Wright-Patterson AFB, Ohio

Air Force Office of Scientific Research  
Washington 25, D. C.

CONCEPTS UNDERLYING PROPOSED REVISED OCCUPATIONAL STANDARDS  
FOR PROFESSIONAL LIBRARIAN POSITIONS AND  
TECHNICAL INFORMATION SERVICE POSITIONS

By William R. Collins

In the standards we are proposing for librarians, we have endeavored to capture the value and essential purpose of libraries....and the intellectual service provided by librarians not only to the general public, but also to scholars, administrators, scientists, and other professional groups.

The new standards, however, cover not only librarians, but also other professional, scientific, and technical positions concerned with document and information processing. Some may wonder why we extended our study to include these additional groups of positions. I would like to give you some of the background for developing the Multi-Series Standard and the new Technical Information Services Series; also, to recount some of the suggestions and comments we received during our fact-finding and on the previous draft of standards for Librarian, and how we have responded to these suggestions.

LIBRARY ASSISTANTS

At the outset, let me dispose of one question which I understand is of some concern to all of you — i.e. "What is happening to the standards for Library Assistants?" Let me assure you that we are currently in the process of developing a draft of standards for Library Assistants. We anticipate that it will be ready for distribution in tentative form for your review early in 1966. Some librarians have expressed disappointment that it was not included in the present draft. We decided on this course of action for two reasons. First of all, as you can see, the tentative draft of standards for librarians and other professional positions concerned with information processing is quite lengthy. To give it a thorough review will be a time-consuming job. Comments received in reply to the 1964 draft indicated that reviewers gave major attention to the standards for Librarian; some made no comments at all on the standards for Library Assistant. Thus, to give adequate time for a comprehensive review of the Library Assistant standards, we decided to issue it separately.

Our second reason relates to timing. Inclusion of the Library Assistant standards with the current draft for Librarians would have delayed distribution for at least another three months. Frankly, we were anxious to get this material out to you for comment, and did not want to delay it any longer.

## BACKGROUND

From the storm of protest that the 1964 draft of standards for Librarian evoked, we realized that a standard primarily concerned with the so-called "traditional" librarian would not be acceptable. As we continued our fact-finding, we became more and more aware of conditions which has developed in the field of information processing:

- the volume of documents and complexity of new knowledge being generated, and the need to keep abreast of developments in other countries;
- the variety of information services (in addition to libraries) which have sprung up in recent years, such as documentation centers, referral centers, clearinghouses, information centers;
- the variety of new jobs concerned with document and information processing, such as information specialist, literature analyst, information scientist, etc.;
- the impact of mechanization and computer technology in storing and retrieving documents and information.

Meanwhile, agency officials had pointed up the inadequacy of our present occupational structure to accommodate non-librarian positions concerned with scientific and technical information. Dr. Hornig, Director of the President's Office of Science and Technology, and other key officials urged the Commission to study and develop standards in this area. In view of the wide-spread interest, a companion project was set up to study positions referred to as "science information specialists." Mary Gallagher, who was undertaking the study of the librarian positions, worked closely with Leon Blumenthal, Chief of our Natural Science and Engineering Occupations Section, in conducting the fact-finding on these jobs.

## SOURCES CONTACTED

Mrs. Gallagher visited libraries in most of the major departments and agencies, such as Army, Navy, Air Force, DSA, Agriculture, HEW, Interior, Justice, VA, FAA, NASA, the Tax Court, and so on. She visited general libraries, including the D. C. Public Library; research, academic, and specialized libraries, including the Library of Congress,

the National Agricultural Library, and the National Library of Medicine, as well as specialized agency libraries such as those at the Naval Ordnance Laboratory and the Naval Research Laboratory. Mr. Blumenthal accompanied her on some of these visits.

Together, Mr. Blumenthal and Mrs. Gallagher visited other information facilities, such as the Defense Documentation Center, the Commerce Clearinghouse for Technical Information, the National Referral Center for Science and Technology, the National Science Foundation, the Director of Scientific and Technical Information for both the Army and the Air Force. Mr. Blumenthal also visited some information evaluation centers, such as the one at Huntsville, Alabama.

In addition to these discussions with individuals in the field of document and information processing, we also did some literature searching to obtain current points of view about library, documentation, and information storage and retrieval activities. We reviewed a number of studies which have been made, e.g. 1) report of the President's Science Advisory Committee on "Science, Government and Information," more popularly known as the "Weinberg Report"; 2) report of the Committee on Government Research of the House of Representatives on Documentation and Dissemination of Research and Development Results; 3) the study of Science Information Personnel by Leonard Cohan and Kenneth Craven; and 4) Proceedings of the Conferences on Training Science Information Specialists, held at the Georgia Institute of Technology in 1961 and 1962.

#### ATTITUDES

As might be expected, we encountered some differences of opinion in controversial areas. For example, suggestions and points of discussion centered around topics such as:

- What is the role of the librarian vs. the subject specialist in document and information processing activities?  
Librarians traditionally have been considered the guardians of knowledge that has been published, and have developed patterns for storing and retrieving published information (i.e. books). Subject specialists, on the other hand, are recognized as having responsibility for interpreting and evaluating information contained in the literature.
- Is there a need to recognize a new occupational category for subject-trained personnel (non-librarians) who are concerned with scientific and technical information? These

are being referred to as "science information specialists," or "information scientists." These titles, however, have different meanings depending upon the user. Usually, the title science information specialist refers to a subject-trained individual who is responsible for organizing, storing and retrieving documents or information, and who works with technical reports, journals, or other unpublished information. The information scientist, on the other hand, usually refers to the individual who is responsible for conducting research and scientific investigations leading to better information systems (i.e. systems that can "read", or systems that can translate from one spoken language to another).

- What is the difference between a library and an information center? In some situations, the library is an organization within an information center. In others, such as the Library of Congress, information activities are a part of the library.
- Is the salary treatment equitable for librarians and other professional, scientific or technical personnel concerned with document and information processing activities? Is sufficient recognition given to the subject, language, library, or documentation knowledges required?

Differences of opinion exist as to the distinction between the services provided by a library or by the other document or information facilities; and between the duties performed by librarians and subject-trained personnel working in the various information services. Because some duties can be performed by personnel in either group, it is not our intention to establish rigid boundaries for occupations concerned with document and information processing. Rather, our primary concern in the development of the proposed standards is that the classification of positions:

- (a) will be a significant factor in recruiting qualified personnel needed to support the agency's library or information program and
- (b) will provide equitable salary treatment for comparable duties and responsibilities.

## WHY A MULTI-SERIES STANDARD?

Rather than establishing rigid boundaries and standards for various occupations concerned with document and information processing, we decided to develop a multi-series standard. In our opinion, the multi-series standard provides the flexibility needed (1) to recognize the commonality of functions performed in information facilities; (2) to accommodate the interdisciplinary nature of the positions involved; and (3) to establish an equitable grade level structure which gives credit for the various combinations of subject, language, library, or documentation knowledges required.

## INFORMATION FUNCTIONS

"Information" is the essential ingredient of positions covered by the multi-series standard.

Information is a commodity, stored in a variety of media: books, journals, reports, film, records, magnetic tapes or drums, etc. These information resources include: formal publications, audio-visual materials, informal publications, unpublished information, and intelligence sources.

Information is handled in many different systems, and each document or information system serves many different communities, each with its own needs, interests, and outlook: the general public, scholars and educators, the business and scientific community, etc. Documents and information are provided through the resources of libraries and other information facilities such as information centers, documentation centers, clearinghouses, referral centers, exchanges, etc.

Collection, organization, storage, retrieval, and dissemination of documents and information are common functions performed in these information facilities. These functions are performed by individuals in different occupational groups, for example by librarians, subject specialists, information specialists, translators, and so forth. However, the manner of handling the documents or information by these various groups differs or is conditioned by (1) the work environment; (2) the mission of the facility; (3) the requirements of users of the service; and (4) the academic background and experience needed to perform the work.

## INTERDISCIPLINARY NATURE OF POSITIONS

Many positions concerned with document and information processing work are interdisciplinary in character, including variations and combinations of different subject-matter knowledges, documentation or library



knowledges, and language proficiency.

For some positions, classification to an appropriate series is obvious, such as: (1) classification of the professionally-trained librarian performing reference service in a general (public) library to the GS-1410 Librarian Series; or, (2) classification of the professionally-trained and experienced physicist, assigned on a rotating basis to an information center to compile a state-of-the-art report in his field of specialization, to the GS-1310 Physics Series.

Between these two extremes are various types of positions for which determinations of the appropriate series becomes more difficult, such as: (1) assignments in a library or other information facility that can be performed by individuals with different backgrounds depending upon emphasis or degree of knowledge required, e.g. indexing or abstracting; (2) library assignments that can be performed by subject-trained personnel, e.g. an individual with a degree in music who gives reference and information service regarding the music collection; or, (3) library assignments with interdisciplinary knowledge requirements, e.g. those requiring a knowledge of librarianship and law.

The multi-series standard provides guides to assist in determining the appropriate series classification of a position where the decision is not clear-cut. In summary, these guides require consideration of (1) the primary qualifications required for the position; and (2) the career relationships of the position involved.

#### GRADE LEVEL STRUCTURE

During our fact-finding, we received a number of recommendations relating to the development of grade level criteria for librarians and other professional, scientific, or technical personnel engaged in document and information processing activities. Major recommendations, for example, requested:

- that we provide grade levels for librarians that are equitable with those for subject specialists doing information work;
- that we provide guidelines for determining the grade level of professional subject-matter specialists performing information functions;
- that we give recognition in developing our grade level structure for subject-matter competence and language proficiency.

In an effort to assure equity, we devised a grade-level evaluation plan for use in evaluating the grade of positions classified to:

- (a) the Librarian Series, GS-1410
- (b) the Technical Information Services Series, GS-1412; and
- (c) the appropriate subject-matter series when the standard for the subject-matter series does not include grade-level criteria for evaluating positions concerned with information services.

The grade level criteria has been developed on a factor basis, rather than a grade-by-grade style. Use of the factor pattern enables evaluation of a much wider variety of work situations with different permutations of duties, responsibilities, and knowledge requirements.

Three factors are considered in the determination of grade level. These are:

#### FACTOR 1 - KNOWLEDGE REQUIREMENTS

This factor reflects the knowledges required by the job and the knowledges possessed and used by the employee. Criteria under this factor measure various combinations of subject-matter knowledges; professional library education; and language proficiency. Three levels are defined representing a progression from basic knowledges to broad and thorough knowledges of a specialized subject requiring prolonged professional training.

Criteria under this factor is based on the assumption that one of the most important factors which influences the level of analysis feasible for source materials is the analyst's level of understanding of the subject matter. For example, a position requiring a M.D. to index the medical literature would be evaluated at Level III; whereas a position requiring a B.S. (basic knowledge of science) would be evaluated at Level I.

#### FACTOR 2 - SCOPE OF ASSIGNMENT

This factor reflects the difficulty of individual assignments primarily in terms of:

- (a) the scope, coverage, and size of the collection with which the employee deals;

- (b) the clientele served;
- (c) the difficulty of materials in the collection;
- (d) the difficulty of the functions performed in terms of the subject, language, or bibliographic competence and experience required;
- (e) the extent of participation in development of programs, plans, policies, procedures, etc.

Three levels of difficulty are described. These are designated as degrees "A", "C", and "E". Intermediate degrees "B" and "D" are not described but may be used when appropriate.

#### FACTOR 3 - LEVEL OF RESPONSIBILITY

This factor reflects:

- (a) the availability of guidelines and originality required;
- (b) the supervisory control over the employee;
- (c) recommendations made;
- (d) nature of person-to-person contacts.

This factor describes three levels of responsibility — degree "a" limited or trainee; degree "c" full performance; and degree "e" the expert who functions with little or no supervision. Again, intermediate degrees "b" and "d" may be used when appropriate.

The grade level of a position is determined by reference to a conversion chart which appears at the end of the standard.

#### THE LIBRARIAN SERIES, GS-1410

Following the format of the new proposal, my comments here will relate to our revision of the series definition, introductory material, and qualification standards for the Librarian Series.

## DEFINITION AND INTRODUCTORY MATERIAL

As a result of the previous draft and subsequent fact-finding, many constructive comments and criticisms were received regarding our description of the work of the librarian. These included, for example:

- Objection to our definition of the occupation of librarianship; many felt it was too restrictive; that intellectual aspects of the work were not apparent.
- Some of the more difficult professional tasks were not included, such as responsibility for book selection; descriptive cataloging was overemphasized in relation to subject cataloging.
- Work performed in research or specialized libraries was not recognized; too much attention was accorded to the "children's librarian."
- Need to recognize use of mechanized equipment or digital computers in the library as a means to accomplish the work of the library.

Our new proposal endeavors to rectify some of these deficiencies. It (1) endeavors to depict more of the intellectual requirements of the librarian, the breadth of assignments, the knowledge of literature resources, language, and subject matter required; (2) describes the different categories of libraries and the services provided by them, such as the public library, the academic library, the research library, the special (or technical) library; and (3) the use of mechanized techniques, semi- or fully-automated systems in the library to help speed or simplify document and information processing work.

## TITLES FOR LIBRARIANS

No consensus on the appropriate titles to use for librarians was apparent from the comments and suggestions received. There were, for example:

- Differences of opinion about the use or omission of functional specializations (i.e. acquisition, cataloging, reference) as part of the title.

- Objections to use of the title, "staff librarian."
- Favorable reactions to the title "research librarian," but widely divergent views as to the definition and conditions under which this title should be used.
- Recommendations to continue use of the subject specializations. After considering the comments and suggestions received, we have decided:

(1) To drop all functional specializations as the "professional" librarian must have a knowledge of all aspects of librarianship, and be able to operate in any of the functional specializations, particularly at the beginning levels. Thus, for the general subject-matter librarian, the title "Librarian" will be used. This is consistent with our practice not to use functional titles in professional occupations (e.g. chemist). The proposed qualification standard, however, permits "selective certification" of librarians with experience in a particular function when the job so requires — i.e. you may select a librarian with experience in cataloging for a job primarily concerned with descriptive or subject cataloging.

(2) To include subject and language specializations in the title for librarian because this represents separate and distinct knowledge requirements. For example, when a position requires a librarian who must also be able to read or translate fluently material in several Romance languages, the position would be titled, "Librarian (Romance Languages)." This signifies that in recruiting for such a position it would be necessary to look first for an individual with a degree in Library Science, or its equivalent and secondly for a librarian with the required language proficiency.

(3) To propose a new title of "Library Director." This title is to be used for positions in charge of library programs or systems which call for extensive management responsibilities. We will be interested in your comments on the appropriateness of the title, and also the circumstances under which it should be used.

#### QUALIFICATION STANDARDS FOR LIBRARIAN

Suggestions for improvement of the qualification standards for librarians centered primarily on the need or desirability of:

- Requiring applicants not possessing the level of education in Library Science to take the equivalency test for initial appointment at all grade levels — not only at grades GS-5/7 as now required.
- Qualifying librarians for higher grade positions by recognizing appropriate education or experience in the subject matter in addition to library education and experience.
- Including some provision for bringing potential librarians into the service as trainees (if the alternate requirement for hiring librarians at GS-5 on the basis of subject background only which is now in X-118, is eliminated.

All of these suggestions have been worked into our new draft of qualification standards. We are proposing (1) to extend to all grade levels the requirement that applicants who qualify on the basis of work experience must pass an equivalency test for appointment as a professional Librarian; (2) a special provision to hire GS-5 Librarians (Trainee) from the FSEE register when there is a shortage of qualified applicants on registers for Librarians; however, such individuals cannot be promoted to positions of Librarian, GS-7, until they meet all the requirements for grade GS-7; (3) to recognize pertinent subject or language experience as "advanced" experience provided the applicant fully meets all requirements for the professional librarian at GS-7; (4) to substitute education at the Master's or Ph.D. level for advanced experience when the applicant meets all requirements for Librarian, GS-7.

#### GRADE LEVEL CRITERIA FOR THE LIBRARIAN-IN-CHARGE

Librarians objected vigorously to the grade level criteria proposed in the 1964 draft of standards. These objections appeared sound to us, and so the quantitative approach has not been followed in the current proposal.

We are suggesting that the new standards for Part II of the Supervisory Grade Evaluation Guide be used in determining the grade level of supervisory positions. We would be interested in knowing whether you will have any problems in applying the guide, and whether it will result in any grade changes - up or down.

THE TECHNICAL INFORMATION SERVICES SERIES, GS-1412

This series has been established for positions which provide information services — such as indexing, abstracting, literature searching — based upon substantial subject-matter knowledges and a practical knowledge of library or documentation methods and techniques. Although the positions call for subject knowledges, the incumbents typically are not considered to be operating as subject specialists; nor are they qualified or functioning as professional librarians.

How do these positions differ from subject specialists?

Ideally, perhaps, it might be desirable to have a subject specialist, with training in Library Science, to provide information services in his own field. Because of the interdisciplinary and mission-oriented nature of the literature today, however, it is not practicable to have subject specialists processing the literature in all the specialized disciplines or areas of interest.

The subject specialist primarily requires knowledge, in depth, of a specific discipline or subject area. Where there is a need to employ a subject specialist, such as a continuing requirement for a chemist to index and abstract the chemical literature, our proposal gives instructions to classify such positions to the appropriate subject-matter series.

The technical information specialist differs from the subject specialist in that he must utilize substantial knowledge, in breadth, of a variety of subjects gained through education or experience. For example, for a position of Technical Information Specialist (Physical Sciences), we would want to employ an individual with substantial knowledge of several of the physical sciences related to his particular position — such as a major in chemistry who also has substantial knowledge of physics, mathematics, metallurgy, or ceramics. As a technical information specialist, he would build upon these varied knowledges and develop an expertise in providing information services regarding the interdisciplinary or mission-oriented literature related to his specific fields of interest.

Why is it necessary to establish this new series?

As mentioned earlier, Dr. Hornig and other key officials had requested the Civil Service Commission to study and provide standards for

professional personnel (non-librarians) who are performing specialized information services in libraries and other information facilities.

During our study, we found that the number of such positions has been growing. Questions arose regarding the proper classification, and qualification requirements because our present occupational structure does not include a specific series for these types of positions.

As a result, positions with similar duties has been classified to different series, including e.g.: the General Clerical and Administrative Series, GS-301; the General Arts and Information Series, GS-1001; the General Physical Science Series, GS-1301; the Librarian Series, GS-1410; the Library Assistant Series, GS-1411; and also to individual subject-matter series. Some positions carried the official title for a particular series. Other positions were referred to as information specialist, literature analyst, indexer, etc.

The proposed Technical Information Services Series will provide specific identification, as well as a career pattern, for positions in this occupational area. This new series is analagous to other series which have been established for positions requiring some mastery of subject knowledges plus the use of specialized functional abilities. For example, the Technical Writing and Editing Series, GS-1083, which requires substantial subject-matter knowledges, writing and editing skills, and the ability to determine the type of presentation best suited to the audience being addressed.

#### Are the titles appropriate?

During our study, we searched for an appropriate title for the series as well as for the individual positions covered by the series. The title finally selected for positions, "Technical Information Specialist," seemed to be most acceptable to the individuals we consulted. We will welcome any suggestions for a more suitable title for either the series, or for the individual positions.

#### SUMMARY

Our proposal covers a wide gamut of professional positions concerned with document and information processing activities in libraries and other information facilities. We realize it will be a time-consuming task to study and review these standards.



Your help, in the form of discussion, suggestions, and constructive criticism, will be tremendously valuable to us. Our objective is to produce standards that will provide a basic personnel tool in the recruitment of qualified individuals to accomplish your mission, and the payment of equitable salaries for the work being done.

## THE ARMY-WIDE LIBRARIAN CAREER PROGRAM

By Agnes D. Crawford

The invitation extended to me to talk about the Department of Army's new career program for librarians is very much appreciated. Some of the librarians attending this workshop worked with me on an ad hoc committee which authored the basic procedures to be followed by this program. I sincerely hope that each Army librarian present had the opportunity to view and comment on the draft regulation in May of this year.

The Department of Army, like any other large enterprise, has the problem of maintaining a competent staff of executive, managerial, and professional personnel. Drastic changes in recent years have vastly complicated this problem. I am sure that each of us present is aware of the significant changes within the Department's organization and mission. Technological advances within the Army are requiring changes within many military libraries. Traditional concepts of library materials, operations, and techniques are no longer current. To meet these and future needs and changing requirements our library force and each library's administrative practices must be constantly reviewed and adjusted. The training and development program, which is a key factor in all career programs of the Army, provides the opportunity and, to some extent, the means by which librarians may become better trained, more knowledgeable, and able to obtain more extensive experience. In other words it's a re-tooling procedure for librarians.

On 13 June 1960, the Deputy Chief of Staff for Personnel designated the Adjutant General as the functional chief for the Army-wide librarian career program. The functional chief of each designated Army-wide program has the responsibility for providing leadership and guidance for the assigned career field, including responsibility for:

- a. Planning and developing the career field program;
- b. Providing technical advice and guidance to commands in the implementation and administration of the career field program; and
- c. Evaluating the effectiveness and providing guidance to improve the administration and operation of the program.

General Lambert, The Adjutant General, appointed me his representative to carry out these responsibilities.

One of my first problems was the fact that the librarian series (GS-1410) was under revision. As it was understood that the revision would be completed in the near future it was decided to delay the career program. However, as all of us know, the revision of the library series was not accepted. At that point it was decided that, irrespective of the Civil Service Commission, the Army-wide librarian career program would get under way not later than the fall of 1964. This decision and its foreseeable problems were discussed with representatives of the Office of the Chief of Civilian Personnel.

An ad hoc committee which included librarians in academic, general, special, and technical libraries was appointed and met in Washington in November 1964. Many problems relating to the career program were discussed and general guide lines were decided upon.

A first draft of the career regulation was completed in April and submitted to members of the ad hoc committee for their review and comments. Copies of this draft were also distributed through civilian personnel channels for comments and recommendations. I sincerely hope that each of you had the opportunity to study this draft. All replies were received and reviewed by me and by representatives from ODCSPER. The final revision of the regulation was completed and transmitted to DCSPER on 2 August. You will be interested to know that my office has recommended that one year from the time the Librarian Career Program goes into effect an ad hoc committee be convened by the Functional Chief to review the operations of the program and to recommend changes to the regulation preparatory to publishing a revision. This recommendation is especially important in order for the career program to include the revisions in the GS-1410 librarian series.

Now to discuss in brief the career program regulation. Librarians are divided into three major categories—administrator, functional or subject specialist, and service specialist. In addition to these divisions by category, personnel are also divided by career levels. The Junior Level, GS-5 and GS-7 includes those librarians whose work is somewhat limited in scope and depth. A program of job orientation, on-the-job training, and supervision is required for all personnel at this level.

The Intermediate Level, GS-9 and 11, places emphasis upon the completion of basic professional education plus an increase in knowledge and technical proficiency. Mobility is especially encouraged at this level to assure the depth of knowledge and breadth of experience desired for positions at the senior level.

At the GS-12 and 13 Senior Level, individuals are expected to attain outstanding competence in their fields through specialization within the librarian profession or within a specific subject field of knowledge.

At the executive level, GS-14 and above, it is expected that administrators, directors, and chiefs of specialties will perform at the highest level of responsibility within their respective fields.

All Army librarians who are U. S. citizens and who occupy positions at grades GS-5 and above in the GS-1410 Library Series are covered by this career program. Each individual will be required to complete a "Qualification Record." The Deputy Chief of Staff for Personnel will maintain an Army-wide qualification inventory file for all librarians registered in the program. Each major command headquarters will maintain a command-wide file for librarians in grades GS-7 and GS-9. Installations, or Army posts and hospitals, will maintain a file for employees GS-5 and above.

Each Army librarian attending this workshop is, I assume, an administrator and as such we will be responsible for the appraisal and counseling of librarians on our staff. A comprehensive and effectively administered career appraisal and counseling system is the keystone to career management. As supervisors we will be expected to consider the qualities of each employee in terms of future assignments as well as in their present position. The handling of this will require considerable objectivity, tact, and discretion on our part.

Upon completion of each counseling and appraisal action the employee's goals, development needs, and plans to meet those needs are documented and become part of the employee's career records.

Supervisors will evaluate the employee's performance over the entire rating period and will appraise the employee's potential for growth, development, and advancement. Career plans for each employee will be reviewed by the supervisor and by the civilian personnel officer or member of his staff.

In order for you to visualize these procedures I have a limited number of forms which will be required for each employee. These include:

- a. DA Form 2302. This is the basic qualification record for each employee. It is a profile of our qualifications.
- b. This same card is also used to record all changes to our basic records, such as additional education.
- c. DA Form 2302-4 is the career appraisal record. These two records will be the basis upon which ad hoc committees will make decisions about an individual's ability to perform a certain job.
- d. Finally, DA Form 2302-2 is used by the installation to request referral lists.

Requests for Referral Lists to fill positions will be submitted to the appropriate command headquarters or the Deputy Chief of Staff for personnel. Ad hoc screening committees, to include at least two librarians, will develop referral lists which will be forwarded to the requesting installation. All movement of personnel is predicated upon the possession of the requisite knowledge, skills, and abilities required by the position.

Training and development as they relate to the Librarian career field provide a uniform and systematic means for all librarians to develop those skills and specializations needed. Included within the program are a wide variety of formal and informal courses. Also included are special assignments, participation in activities or professional organizations, and independent study.

Self-development activities are an integral part of the librarian career program. In addition to courses sponsored by the Department of Army and indicated in the overall training plan, special training at non-governmental facilities and at colleges, universities and professional associations is encouraged. Army librarians will be encouraged to undertake individual projects to enhance overall knowledge and understanding of new library techniques, procedures, and materials; to increase competence in particular areas of interest; and to compensate for shortages identified in the library field. Toward these ends, employees are encouraged to take full advantage of available correspondence courses and opportunities for off-duty college and university study under the Army's General Educational Development Program.

The purpose of the Department of Army's master training plan for librarians is to assure a steady flow of capable personnel, fully qualified and trained to fill Army library positions in all types of Army libraries located both within the United States and overseas. The objectives of this plan are:

- a. Improve the quality of employees
- b. Provide a planned basis for self-development
- c. Encourage matriculation in a college or university to meet desired minimum educational standards
- d. Provide training and appraisal procedures under major command and Department of Army supervision
- e. Provide mobile, experienced librarians for emergency expansions and for replacements for vacancies
- f. Provide a more tangible procedure for advancement
- g. Develop understanding of the mission of the Army and the library's place in meeting this mission
- h. Develop constructive attitudes toward library service in the Army and the teamwork required of professional, nonprofessional and military personnel for the successful accomplishment of the library's mission.

I'm aware that this has been a short discussion on a fairly complicated procedure. I have tried to select those parts of the career program which I think will be of greatest interest. I've tried to restrain myself and not tell you more than you want to know. Should you have questions I'll be glad to attempt to answer them.

NAVY AUTOMATED RESEARCH AND DEVELOPMENT INFORMATION  
SYSTEM (NARDIS)

By Joseph L. Fuchs

I. In response to a DOD instruction of January 1965, the three military services are to report digitally to the Defense Documentation Center (DDC) all ongoing research and development at the work unit level. For this purpose the Navy has established the Navy Automated Research and Development Information System (NARDIS) located at the David Taylor Model Basin. NARDIS furnishes additional service to the Navy by reporting R & D also at the task area and project levels, and by supplying information in addition to DOD requirements.

Ongoing R & D reporting covers roughly the grey area between research in progress and report publication. If reports are published in the interim, however, they are listed as references. The method of reporting is on the DD 1498 (NASA 1122) and the NARDIS Supplement NDW-TMB-952. Some Navy agencies also report via current "working papers."

NARDIS is under the technical direction of the Office of Naval Research (ONR) and under the administrative control of the Bureau of Ships. At the Model Basin, NARDIS is a division of the Applied Mathematics Laboratory. NARDIS internally is divided into three branches: (1) Programming and Systems Analysis; (2) Technical Indexing and Cataloging; (3) Operations. The first Branch programmed the NARDIS system and is continually improving and redesigning various elements. The second Branch prepares data input, subject searches and thesaurus development. The third Branch monitors machine operations and microfilming.

II. On a current operational basis, the work flow follows this pattern. DD 1498's or working papers are received and dupe checked. The units are cataloged (logistical data), abstracted (textual data) and indexed (subjects). They are typed, microfilmed on aperture cards, keypunched, card to tape, and updated on the Univac LARC computer. Newly added work units are submitted to DDC periodically.

This processing results in the files maintained as a basis of NARDIS. These files are: (1) Logistical or Management Data file (LOG); (2) Abstracts file (TEXT); (3) Subject indexing file (SUB). These three, and the thesaurus file (THES) are tape files. The aperture card file (MICRO) is the last file.

The LOG File contains data such as funding, performing organization, budget codes, scientific areas, title, security, etc. The TEXT File contains a summary of the objective, approach, and progress of the work in 3000 characters or less. It also contains for Navy use prior and future work, references and contract information. The SUB File contains the indexing from the objective, approach and progress portions of the DD 1498. The MICRO File is used basically to reproduce hard copy in response to queries. The THES File is a computerized, controlled vocabulary, used for indexing into the SUB File.

III. NARDIS is responsive to both management (logistical) and technical subject searches. The turn-around time within NARDIS is 24 - 48 hours on most queries. The form to be used is NAVSO 3920/1, NARDIS Data Request and Approval. Supplies were initially available from Chief of Naval Research, NARDIS Management (Code 104S), Main Navy, Washington, D. C., and should now be available in the Navy Supply System as "Cog I" material. Each Bureau is to set up an authorized signature list to approve incoming queries.

Searches can be of a management, subject, or combined type. A simple management query might be: How many work units under ONR control are in the form of grants and contracts, and what is the total funding for each group? This is answered by a LOG File search. A simple subject query might be: Is the Navy sponsoring any research in medical lasers? A combined search is just a subject query for which logistical data is also required: What research on missile guidance for surface to air missiles is on contract to XXX Company? Once the computer has selected the accession numbers responding to the query, a generalized Report Generator prepares a computer printed report. Up to 101 data fields can be printed for each accession in three lines, and several fields can also be totaled.

Output formats are printouts as report summaries, aperture cards, hard copy blow backs, or magnetic tape.

IV. The Indexing for NARDIS follows the Engineers Joint Council (EJC) method of links and roles. A link relates words belonging to one concept, or, subdivides a resume into its individual intellectual relationships. A role goes a step further, and defines the function or use of the term in relation to other terms in the same link. This system requires a controlled thesaurus.

The NARDIS thesaurus was initially assembled by a computer merge of the Engineers Joint Council's Thesaurus of Engineering Terms



(10,500 terms) and the Bureau of Ships Thesaurus of Descriptive Terms (4,700 terms). About a thousand additions and deletions have been processed so far. To take into account the scope of Navy research, the thesaurus is open-ended.

Copies of a progress report on NARDIS, DTMB Report 2103, August 1965, may be obtained from DDC.

## DOD-WIDE TECHNICAL THESAURUS

By J. Heston Heald

On October 12, 1965, the Director of Defense Research and Engineering, Dr. John S. Foster, signed a multiple-address memorandum to the Secretaries of the Army, Navy, Air Force, the Directors of Defense Agencies and the Assistant Secretaries for Installations and Logistics, Systems Analysis, and Comptroller. I am sure that this memorandum will be of considerable interest to librarians. The effect is to set in motion a project for the preparation of an authoritative, standard technical thesaurus for the Department of Defense.

The Office of Naval Research was designated as the organization in DoD responsible for performing the task. All other DoD activities involved in the many-faceted areas related to scientific research, engineering, development, and other technologies have been asked to provide assistance commensurate with the extent to which they are involved.

The plan of action calls for the establishment of a 14-man task force within ONR. The nucleus will be in-house DoD personnel. The force will be supplemented by supporting contractual services. A project director will be named and provided by ONR. The schedule calls for the task force to assemble and begin work on or about the middle of December 1965. A target date of April 1967 has been set for actual publication.

Copies of the October 12th memorandum have been made available to each participant registered for this Workshop. Somewhat detailed plans and schedules have been drawn and included in three enclosures to the memorandum. And, for the record, I would like for that memorandum and its enclosures to be considered as the essential part of this presentation and that my few remarks be more in the nature of introduction.

As we grow closer and closer together with continually improving communication networks, common or standardized methods become more and more important. The vocabulary that we use is probably the most important one key to a communication system involving transfer of technical information--whether it be represented in codes or natural language--whether it be by the spoken word or by magnetic tape. Language standardization, then, is important and the more vast the system or file of information and the more mechanized or automated we become, the more the need for standardization.

The Committee on Scientific and Technical Information (COSATI) of the Federal Council for Science and Technology has recognized this evolutionary trend and over a year ago developed and adopted a broad base Subject Category List. As it stands today, this List has two principal uses: (1) announcement and distribution of technical reports, and (2) management reporting.

The Department of Defense has now put the List to use for both of these purposes in certain of its programs. DDC is now arranging entries in its Technical Abstract Bulletin (TAB) by the COSATI Subject Category List, and a DoD-wide certification procedure based on the List is now being set in motion as the result of the new DoD Instruction 5200.21, titled "Certification for Access to Scientific and Technical Information," which was issued on September 1, only two month ago.

Also, as a result of two DoD Instructions issued within the year, the List has been put into use for purposes of management reporting at work unit and program planning levels. These two are (1) DoD Instruction 7720.13, dated January 27, 1965, and (2) DoD Instruction 7720.16, dated August 6, 1965.

I will not go into details regarding the above implementations. I mention them here only to point out the recognition by the Department of Defense for a common communication base in these areas, as well as to emphasize the concern in DoD for a related and standard base on a much more specific pattern that could be applicable throughout the DoD research and development community.

The COSATI List, of course, is much too general for application to storage and retrieval of information. But we see in it a categorization, expressed in subject fields and groups that may accommodate all of the specific concepts related with the conduct of all DoD research and development. To determine and indicate these relationships will be one of the prime objectives of the DoD-Wide Thesaurus effort. I should also point out, in this connection, that it is the purpose to establish each term selected for the Thesaurus as a standard data element in the over-all DoD Data Elements Standardization Program; e.g., unless it has already been so established.

Every effort will be made to bring all technical terminology and concepts to bear on the project. Schedules for dealing with various subjects will be arranged and announced to systematize the input so that all may have an opportunity to present local or specialized interests.

One effect the October 12th memorandum has is to, temporarily at least, stop all current DoD thesaurus efforts in lieu of this project. This is to (1) emphasize the concerted input to the DoD-wide task; (2) to permit development of standard conventions for future thesaurus building; and (3) to provide a tool that may be used by all and avoid the building of numerous thesauri on a non-uniform basis. The very fact that many thesaurus efforts were being undertaken or initiated through DoD, each within its own framework and without over-all structural compatibility guidance, has added emphasis to the requirement for DoD-wide action.

The name of the project will be Project LEX. There are several reasons for selection of this three-letter word. It is word of Greek derivation with two related meanings; first, it means "in full" which expresses the coverage of the Thesaurus; second, it means "a law" or an authority, which expresses the objective that the Thesaurus become an authoritative technical vocabulary within DoD. Further, the letters of the word also form the first syllable of the words "Lexicon" (a thesaurus is a form of lexicon) and "Lexicography" (which is the act of building a lexicon).

Finally, the success of this project will depend heavily upon enthusiastic cooperation. All of you who are involved with scientific or technical collections in your libraries, technical information centers, or offices, will have related interests, directly or indirectly, in the progress of this work. We invite any participation that may be necessary to express this interest. An example of participation you might take would be to see that word lists, subject headings, thesauri, descriptors, concepts and the like, which you have developed for your own local needs, be submitted to the task force for consideration. You may also wish to actually sit in on some of the panel sessions that will be scheduled from time-to-time as various broad subject areas are discussed.



**DIRECTOR OF DEFENSE RESEARCH AND ENGINEERING**  
WASHINGTON, D.C. 20301

October 12, 1965

MEMORANDUM FOR THE SECRETARY OF THE ARMY  
THE SECRETARY OF THE NAVY  
THE SECRETARY OF THE AIR FORCE  
THE ASSISTANT SECRETARY OF DEFENSE (COMPTROLLER)  
THE ASSISTANT SECRETARY OF DEFENSE (INSTALLATIONS & LOGISTICS)  
THE ASSISTANT SECRETARY OF DEFENSE (SYSTEMS ANALYSIS)  
THE DIRECTOR, ADVANCED RESEARCH PROJECTS AGENCY  
THE DIRECTOR, DEFENSE ATOMIC SUPPORT AGENCY  
THE DIRECTOR, DEFENSE COMMUNICATIONS AGENCY  
THE DIRECTOR, DEFENSE INTELLIGENCE AGENCY  
THE DIRECTOR, DEFENSE SUPPLY AGENCY  
THE DIRECTOR, NATIONAL SECURITY AGENCY

SUBJECT: DoD-Wide Technical Thesaurus

There is a strong and continuing need in the Department of Defense for maintaining a comprehensive and up-to-date reference authority for the terms used to describe scientific and technical subjects. The inter-disciplinary character of science, engineering, and other technologies is recognized in such DoD activities as requirements studies, intelligence estimates, program planning, budget analysis, research and development, operations, supply, maintenance, and the documentation associated with these activities. Effective communication and understanding between disciplines, at all echelons of management, depends upon access to a consolidated record of how the specialized languages are actually used.

The need for a thesaurus-like reference authority to technical terminology is recognized throughout DoD and the Defense contract program. The diverse and uncoordinated efforts now underway in the Army, Navy, Air Force, Defense Supply Agency (including the Defense Documentation Center), and the Defense Intelligence Agency illustrate the urgency for DoD-wide action. To avoid duplication of effort and to mobilize the currently applied resources for greater effect, I believe that DoD should have a single project to which all DoD components can contribute and on which DoD contractors and the professional societies can focus their participation.

Each of the Military Departments and the Defense Agencies has been surveyed by the Director of Technical Information, ODDR&E, to consider whether it could assume responsibility for DoD-wide coordination of the technical thesaurus project. This review indicates that the most attractive alternative

is to organize the project within a scientific and technical unit which has professional talent covering a wide range of subjects and to establish a project task force there to do the job.

The Office of Naval Research is hereby designated as the organization in DoD responsible for preparation of an authoritative inter-disciplinary technical thesaurus. Detailed program discussions have been held with ONR.

The Assistant Secretary of Defense (Installations and Logistics) will designate this project as the official DoD standardization effort on technical thesaurus in a memorandum to be issued separately.

The Assistant Secretary of Defense (Comptroller) will designate the Office of Naval Research as the Assigned Responsible Agent (ARA) for preparing an authoritative technical thesaurus as part of the Data Elements Standardization program. The memorandum of assignment will be forwarded shortly.

The Work Plan and an approximate time schedule have been developed and are hereby approved as the official scope of the technical thesaurus project. They are attached as Enclosure 1.

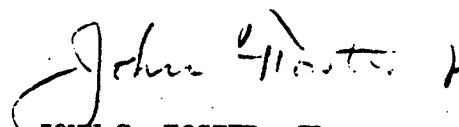
A full-time task force will be established within ONR. Personnel for the task force will be assigned and organized in accordance with the schedule shown in Enclosure 2.

A statement clarifying the intent of a thesaurus as compared to a dictionary or glossary is attached as Enclosure 3. This memorandum is concerned only with thesaurus activities.

All addressees of this memorandum are requested to provide assistance to the project as set forth in the Enclosures.

Each addressee of this memorandum is requested to make an immediate review of current or proposed in-house and contractual efforts in the field of technical thesaurus construction and maintenance, and to suspend such efforts in favor of concentrating the resources so engaged into the new task force project. Any technical thesaurus effort that must be continued shall be submitted to my office for review and approval. Where approval is given, it will be with the understanding that the DoD-wide project has precedence and coordination with it will be required.

Properly conducted, with strong participation by all pertinent elements of the Defense community, this new project can have an important and **favorable** future impact on the effectiveness of technical communications in all echelons of DoD and in all phases of the Department's work. Your prompt attention and adherence to the proposed schedule will be greatly appreciated.

  
JOHN S. FOSTER, JR.

Enclosures 3

WORK PLAN - DOD-WIDE THESAURUS

Purpose: To develop and publish a scientific and technical thesaurus for use by all elements in the Department of Defense, and their contractors, who are engaged in the management and execution of research, development, engineering, design, procurement, supply, and maintenance.

Products Desired:

1. A manual setting forth DoD conventions for thesauri building.
2. A thesaurus of scientific and technical descriptors devised from terms or concepts essential to the storage and retrieval of information or data related to DoD research, development, engineering, design, procurement, supply, and maintenance, and arranged in format or formats that will provide:
  - a. Definition or scope notes that will as clearly as possible show the uniqueness of each term, its generic relationship with others, and with appropriate cross reference;
  - b. Orderly arrangements in natural language that will afford rapid and straightforward approaches for different kinds of usage;
  - c. Relationship of the whole to the COSATI Subject Category List;\*
  - d. Codes for machine manipulation; and
  - e. Indexes as may be necessary for usage guidance.
3. Recommendations for any changes in the COSATI Subject Category List that may become apparent during the course of the work.

Approach: The work will be performed by a full-time task force, supplemented at intervals with representatives from DoD operating and contractor activities who are directly concerned in one or more specific subject fields.

The group will be set up in a separate working area provided by the Office of Naval Research. ONR will provide the Project Director and clerical personnel and will also provide supporting office supplies, equipment, and assistance where needed in reproduction and occasional computer time with the required operating and programming personnel. The Project Director may arrange for consulting service, either from within ONR or from outside sources, as such may become appropriate.

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\*The COSATI Subject Category List has been issued by the Committee on Scientific and Technical Information of the Federal Council for Science and Technology as the official government-wide technical vocabulary for document announcement, security control, and management reporting.



The work will be given priority, and the schedule reflected in the following time-table will be met as closely as possible. Some changes in plans may be necessary as the operations proceed, but the terminal date should remain fairly firm.

Time Table:

<u>Event No.</u>	<u>Event</u>	<u>Target Date</u>
1.	Letters out to Services submitting plan and requesting assistance and task force assignments.	12 Oct 65
2.	Complete space and equipment arrangements.	29 Nov 65
3.	Personnel assignments made.	29 Nov 65
4.	Task Force convenes - actual work begins.	13 Dec 65
5.	Identify and list areas and activities to be covered. Prepare work schedule chart.	20 Dec 65
6.	Coordination draft of conventions and guidelines.	30 Dec 65
7.	Approval or comments of #6 received.	14 Jan 66
8.	Complete conventions and guidelines for publication.	28 Jan 66
9.	Collection of pertinent vocabularies and tapes or punch cards (where available).	4 Feb 66
10.	Identify compatible terms or concepts in various lists and those requiring resolution of differences.	28 Mar 66
11.	Complete preliminary compatible concept list showing inclusions, exclusions, and cross references to accommodate concepts and make preliminary assignments to COSATI SCL.	15 Aug 66
12.	Conclude series of meetings and contracts with representatives from various subject or activity areas.	26 Sept 66

<u>Event No.</u>	<u>Event</u>	<u>Target Date</u>
13.	Complete semi-final compatible list, COSATI SCL assignments, and scope notes.	14 Oct 66
14.	Complete check and clean-up.	4 Nov 66
15.	Complete index or indexes.	11 Nov 66
16.	Final draft prepared.	9 Dec 66
17.	Final coordination complete.	7 Jan 67
18.	Final refinements and clean-up.	27 Jan 67
19.	Codes for computer input.	10 Feb 67
20.	Prepare computer tape.	24 Feb 67
21.	Run Manuscript copy and release to printer (GPO).	15 Mar 67
22.	Issuance	April 67

TASK FORCE COMPLEMENT

## For DoD-Wide Thesaurus Project

The full-time task force will be a 14-man team; 11 professional (preferably in the GS-11 to GS-15, or comparable grades) and 3 clerical. The breakdown of this team and the approximated total man-years in accordance with the time schedule for preparation of a first edition is shown below. Each Department or Agency named will be responsible for supplying the number indicated, or for a transfer of funds to ONR in the amount necessary to support contract personnel in lieu of in-house personnel. Arrangements will be made by ONR for supplementing the effort on a contract basis.

<u>Professional Personnel</u>	<u>No.</u>	<u>Total Man/Yrs.</u>
Office of Naval Research (Project Director)	1	1 1/4
Army	2	2 1/2
Navy	2	2 1/2
Air Force	2	2 1/2
Defense Documentation Center	2	2 1/2
National Security Agency	1	1 1/4
Defense Intelligence Agency	1	1 1/4
	<u>11</u>	<u>13 3/4</u>
 <u>Clerical Personnel</u>		
Office of Naval Research (1 Secretary; 2 Stenos or Clerk Typists)	3	3 3/4
Total	<u>14</u>	<u>17 1/2</u>

The above personnel assignments are required from each of the Services and Agencies listed. Each civil service employee assigned will be responsible to the Project Director. It is anticipated that the Project Director will be the Project Officer for such contract service that may be required.

The professional staff of the task force should be made up of individuals who represent the highest qualifications for scientific and technical vocabulary building in their respective Military Service or Agency and within the grade levels indicated above. The Army, Navy, Air Force, Defense Documentation Center, DIA, and NSA will each designate an individual or an office to serve as its focal point for internally coordinating the effort and assuring input to the project from its related interests. Each of the other Defense Agencies not named will have the option of designating a focal point representative who may serve full- or part-time on the task group as the needs of each may dictate. ONR will be informed of all focal point designations prior to 20 October 1965.

coordination with the respective Services and Agencies, the Project Director may arrange for alternates for the regular members, or for part-time additional assignments, when it is deemed important to bring specialized skills to bear on the project. Continuity of effort and thoroughness of coverage will be the prime factors governing these moves.

Short-term working panels (usually from one to five days) may be scheduled by the Project Director from time-to-time. These will be scheduled when specific subject or usage areas are to be considered by the task force and for such duration as the Project Director may determine for optimum input. Working panels will be formed on an invitation basis with full expenses born by the activity they represent. Pertinent DoD in-house and contractor activities as well as non-DoD government activities may be included. Focal points will insist in seeing that this opportunity is extended to pertinent activities of contractors within their respective agencies.

so, it may be anticipated that the Project Director or focal point representatives will find it essential from time-to-time to seek consultation with scientists or engineers concerning terminology in special fields. Cooperation in this respect will be highly desirable.

Although the project will be considered as terminated with completion of a first edition manuscript and other products that have been listed in closure 1, the focal point representatives should continue to be recognized at each Service and Agency for continuation on a limited basis for further collection, refinement, and building of vocabulary terms which will eventually lead to future revisions.

A THESAURUS AS COMPARED TO A DICTIONARY OR GLOSSARY

As is usually the case with closely related articles or tools, the principal difference between a thesaurus and a dictionary or glossary lies in the use for which each is intended. It is the purpose here to briefly describe the purpose of a thesaurus and how it differs with a dictionary or glossary as a vocabulary tool.

For indexing purposes, librarians and documentalists have long faced the problem of reducing the words in the text of an article or book to a few key words or descriptive terms. This is forced upon them simply because it is both impractical and illogical to index every word. The same situation is faced when one searches a collection of documents for information. He must reduce his question to the principal words or terms describing his subject area, else he would be lost in a maize of useless approaches. Hence, a common subject matter guide for both indexer and searcher is essential.

The logical arrangement of words and combinations of words to meet this need has taken many forms. Subject classification systems for placing generically related kinds of knowledge together have been most prevalent--such as the Dewey Decimal Classification System and the Library of Congress Classification System. In recent years "subject heading" lists for specialized collections have been heavily used. "Descriptors" and "unitersms" are other variations for arranging a vocabulary to afford ways and means to control knowledge in the bibliographic processes.

With the coming of automation, a thesaurus-like arrangement of terms has aided the user of subject terminology by adding clarification of synonyms, antonyms, homographs and hierarchical relationships. This clarification becomes of increased importance where manual or eyeball inspection is eliminated after computer or mechanized techniques take over.

Unlike dictionaries or glossaries, none of the lists or arrangements referred to above carry definitions as such. Although definition is implied throughout their organization, the major purpose is not to define. The thesaurus is tailored to provide an authoritative guide or road map to subjects, broad and narrow, with forward and back approaches for effective storage, retrieval, and communication processes.

There is also a difference between "word" and "term" as we think of scientific and technical thesauri. The emphasis here is on the "term." A term may be a single word, or it may be a combination of words. Each term represents a concept or a unit of information. This is quite different from a dictionary which essentially deals with single words.

Generally, a glossary also deals with terms as well as separate words. But a clarifying definition for a particular use is involved and an arrangement showing hierarchical relationships or classification of subject matter is seldom used. According to Webster, a glossary is a collection of glosses, and a gloss is a difficult word needing explanation or interpretation. It is a partial dictionary.

It should be noted that, in the building of a thesaurus, dictionaries and glossaries furnish important guidance. Definitions and interpretations combined with usage in the literature itself provide the key to the thesaurus arrangement.

Finally, whereas dictionaries and glossaries are generally used for the purpose of defining words or terms, an almost inverse use is the role of the thesaurus: to assist in identifying the term to fit the concept.

## ROUND TABLE DISCUSSION ON DOD LIBRARIES

By O. W. Holloway, chairman

1. Generally speaking there are few problems of military libraries which are unique to DOD libraries. Discussion during this session covered the following items:

a. The Army Career Program for librarians was discussed at length. The suggestion was made that some day this program could be expanded to be a DOD program, thus encompassing all military librarians.

b. Much discussion centered around the lack of a "DOD Librarian" who could speak for DOD librarians. At present there is no one on the DOD level. Each of the services has one person who can speak for the librarian in that service. The DOD representative on the Federal Library Committee is not a librarian and was appointed to that post because of the lack of someone who could logically fill the need.

Some of the suggestions made to correct this need were:

Appointment of a DOD Library Coordinator on a high organizational level in DOD.

Designation of the "Army Library" as the DOD Library, which would automatically make the Director of that library the top professional man in DOD, thus enable him to speak officially as the DOD Librarian.

2. The general consensus of the group with regard to the problem stated above (1b) was that further discussion on this matter would be helpful.

## A FEDERAL LIBRARIANS DIVISION WITHIN THE SLA

By Herbert Holzbauer

The proposal that is being brought to your collective attention today is that of establishing a Federal Librarians Division within the Special Libraries Association and the overall impact such an action would have on the Military Librarians Division as well as on the individual military librarian. The part that the present division can play as a focal point for this expanded effort will be indicated later.

Perhaps the first question that ought to be logically raised is the one pertaining to the "why." Why would anyone suggest the founding of a Federal Librarians Division within the SLA? Well the answer in my mind is relatively simple and straightforward. The Federal Librarian has come of age. Latest estimates based on various surveys and studies in preparation by the Office of Education indicate that there are 848 Federal Government and National Libraries each with a budget of over \$10,000. 1/ These libraries are special and research libraries. Base and recreational libraries are excluded from the above figure. Furthermore the latest approximation of professional librarians employed under the GS-1410 Civil Service Series in the various Federal Government and National Library Systems is over 3,640 1/, quite a segment of important and dedicated persons in the overall Federal information accessibility and communications link - and that isn't all - the Federal Government recruits 400 Librarians annually to serve executives, administrators, judges, scientists, engineers, lawyers, doctors, statesmen, educators, military officers, social and political scientists in the various Federal and Governmental agencies.

2/

The number of special libraries and their respective professional staff only begin to illustrate the recent emphasis and increasing awareness placed on the Federal Librarian as a whole. You were previously acquainted with the establishment of the Federal Library Committee and its various task forces. You may recall that this Committee was studying, analyzing and preparing recommendations which include all Federal and National Library Systems; that the major areas of interest encompass nearly all library activities as reflected by the Committee's activities in automation, acquisition of library materials, correlation of library resources, the mission of the Federal Library, standards of service, procurement procedures, interlibrary loan arrangements and the recruitment of personnel. You will also undoubtedly recall that although the office of this Committee is located in the Library of Congress, the Bureau of the Budget, the Federal Council for Science and Technology and numerous Executive Departments including Defense constitute a portion of its permanent membership.



It may be timely to recall the Draft of the BYLAWS of the Military Librarians Division 3/ which under Article I, Section 2 reads as follows,

"The objectives of this Division shall be those of the Special Libraries Association: To encourage and promote the utilization of knowledge through the collection, organization and dissemination of information; to develop the usefulness and efficiency of special libraries and information centers; to stimulate research in the field of information services; to promote high professional standards; to facilitate communications among its members; and to cooperate with organizations that have similar or allied interests."

Follow this with Section 3 of Article I which reads,

"Special objectives of this Division which has been formed for the purpose of bringing together those with mutual interests in military librarianship are: to provide a forum for the exchange of ideas and information of military librarianship; to conceive and carry out projects which will assist members in providing increased and improved services to the users of military libraries; and, to improve the professional advancement and importance of its members in the military community."

Ladies and Gentlemen, I submit to you the fact that at this time and date it would be extremely difficult to address ourselves in a vacuum and carry out the Special Objectives as stated in Section 3, Article I, without, I repeat, without a full-fledged Division expansion which would embrace the professional library staff of our other Governmental sister agencies.

I have recently read an article on creativity which is a special subject interest of mine, in which a particular paragraph on the Dynamics of Creativity is appropriate. The author, Charles C. Givvons 4/ writes,

"One of the great challenges to leadership in an organization is the responsibility for motivating members of the organization to put forth their best efforts to achieve the goals of the organization. Members of the group will be fully productive only if they feel that they can achieve their own personal goals by accomplishing the objectives of the organization. The objectives of the organization, rather than the wishes of the leader, must be perceived as the controlling factor."

Now I do not in the least wish to indicate that our division officers are not open-minded and sympathetic; otherwise I wouldn't be here addressing you. What I do wish to point out however, is that your objectives particularly your specialized ones could more easily be achieved in an environment which is based on a broader foundation taking the so-called "Big Picture" into full account. As a matter of fact, the tentative draft of the new GS-1410 standards 5/ states in its introduction:

"After considering all points of view -- and after much thought, discussion with librarians, attempts to define appropriate specializations which would be mutually exclusive -- we have decided to drop all functional specializations. Our primary reason is that the professional librarian must have a knowledge of all aspects of librarianship, and be able to operate in any of the functional areas. In a number of libraries visited, we found that the professionally-trained librarian assigned to one function may be rotated or detailed to other functional areas, as needed or on a recurring or regular basis."

Can you as a professional librarian ignore the activities of such high level organizations as we have mentioned? Can you categorically state that whatever COSATI recommends, is only applicable to others? Can you really believe that the analytic studies of the Federal Library Committee concern other than military librarians? Do you really still feel yourselves as a separate class of professionals with problems and objectives so remote from other special federal libraries as to exclude them from your organization? If you still do, then current events are rapidly overtaking you and the chances are that your future will be shaped by outside events over which you will have little or no voice.

If, however, you are taking stock of the prevailing situation within the Federal Government then you are fully aware of the many studies that are currently underway both within and external to the Department of Defense in relation to the information problem and the various solutions possible with the aid of both specialized organizations as well as the technical libraries.

What voice do you currently have as a professional group to guide, to offer constructive criticism, to create, initiate, or motivate these organizations? What voice do you now have in response to management responsible for the analysis of these findings and their suggested recommendations for various solutions to solve some of the problems presented? Are you as SLA Division of 295 military librarians sufficient to form a

channel with a voice strong enough to carry it wherever you think it ought to be heard so that you may add to the efficiency and overall effectiveness of the plans or actions under review. Or are you generally in the category of providing a reaction in an "after the fact" manner when the important decisions have been concluded and have been approved.

Management I think wants to play fair at all times and wishes to receive the best council while constantly looking at the overall problem. If this is the case, management may be a lot more inclined to receive a consensus or recommendations sponsored not by a rather limited specialized group such as now constitutes our division but by a large broad-based group which really would represent the majority of federal professional librarians.

There is another reason as well for recommending such a program to this group. The Military Librarians Division has had a number of distinguished members as part of its organization. Generally the members of this division are alert, forward looking, experienced and have a great leadership potential. With this type of background, this Division and the military librarian within it can act as a nucleus for the expanded activity of a much larger and much more powerful Federal Librarians Division. Your charter can readily be expanded. Your committees, special committees and organization pattern can be easily extended. It would be a relatively logical and uncomplicated effort to accommodate other professional federal librarians.

Further, I would like to quote the latest SLA Executive Report 6/ in which Bill Woods states:

"Income from membership dues and fees for the period October 1, 1964 through the end of May, 1965 is lower than it was in 1964 - 65; \$121,395 vs. \$124, 123...The lower total of active members suggests once again the need for an aggressive membership campaign among qualified special librarians."

Ladies and Gentlemen, as professional dedicated federal librarians you can aid your organization, your performance of vital services, your management and your profession by supporting the proposition of a Federal Librarians Division within the SLA. Please remember that of the approximate total of 12,000 professional librarians working in some 6,120 special libraries, 3,640 or some 30.3% are employed as professional Federal librarians in 848 or 13.9% special and technical Federal libraries.

- 1/ Figures provided by the Library Services Branch, Office of Education as "PRELIMINARY."
- 2/ U. S. Government Printing Office: 1965-0-787-843.
- 3/ Military Librarians Division Bulletin Vol. 10, No. 1, October 1964.
- 4/ Gibbons, Charles C. Improving the climate for Creativity in Your Organization.  
Advanced Management Journal, July 1964.
- 5/ U. S. Civil Service Commission, Bureau of Programs and Standards. Tentative Draft of a Proposed Revision of the Librarian Series GS-1410 ... October, 1965.
- 6/ Special Libraries Association Revised Report of the Executive Director 1964 - 1965.

## THE STINFO OFFICER AND THE TECHNICAL LIBRARY

By J. L. Cook and Marie Koeker

It is assumed that the group gathered here is knowledgeable concerning "STINFO," the "STINFO Officer," and "STINFO" -- a STINFO liaison officer. With this in mind we shall commence with the problem at hand.

I am sure that we will all agree that STINFO is here to stay and that it is of utmost interest to Military Librarians. This situation reminds me of the story of the man who crossed a parrot with a tiger. What he got --- well, he didn't know what to call it, but when it spoke -- he listened!

Late in September and early October of 1963, the First STINFO conference was held at Dayton, Ohio. One of the recommendations to come out of this meeting was that a course of instruction should be given individuals who would be appointed STINFO officers, or those assigned to work in the program. In addition, it was requested that the Air Force Institute of Technology should provide this instruction.

In the STINFO MANUAL within the Air Force section and Part IV, Organization and Training, paragraph number 2.

"A formal AFIT course of instruction in scientific and technical information will be established...This intensive two-week course will be repeated periodically on a continuing basis."

Consequently, Major I. B. Thompson was appointed to develop a course within the School of Systems and Logistics in conjunction with the Office of Mr. Ed Grimes, Mr. STINFO.

In February of 1964 courses were developed at AFIT. It was at this time that I enquired concerning the materials which were to be presented in this course. I recalled full well the feelings and ideas of some individuals for technical librarians and librarianship. I was surprised to learn that Major Thompson was not considering technical libraries and their available services in his prospectus.

I immediately "stuck my foot in the door" and it has been there ever since. Soon I hope we librarians can do better than that.

Courses commenced in October of 1964. At present time of discussion there have been four sessions.

I shall attempt to give you a short resume of the course. It is entitled "Scientific and Technical Information Class No. 375" in the AFIT Catalogue and is provided by the School of Systems and Logistics, within the Department of Logistics Plans.

Course Instruction Methods: The majority of the lectures are presented by Hq USAF, AFSC, OAK, and School Systems and Logistics people who have extensive knowledge and experience in Scientific and Technical Information acquisition, storage, retrieval, and distribution.

The instructional techniques used in the course are completely student centered. Each student, within the bound of courtesy and propriety, is encouraged to participate and freely discuss his thoughts on the subject material presented. Instructional methods utilized include lecture, discussion, field trip, and individual student presentations.

#### School of Systems and Logistics

#### STINFO (375)

(Scientific and Technical Information)

(2 Weeks)

#### PURPOSE

This course is designed to provide the students with an understanding of the USAF STINFO program and their role in such a program.

#### SCOPE

The major subject matter involves presentations on the following:

1. Definition of the reason the STINFO program was established.
2. Explanation of the DOD and USAF STINFO program.
3. Discussion of the roles of the STINFO officer, the Scientific and Technical Liaison officers, the scientists and engineers, etc., in the program.

4. Discussion of the use of automatic data processing equipment and systems in the STINFO program.
5. Identification of the various activities involved in scientific and technical information: acquisition, storage, retrieval, and dissemination.
6. Discussion of the goals to be achieved in the future.

#### PREREQUISITES

This course is intended for scientists, engineers, STINFO officers, Scientific and Technical Liaison office people, laboratory branch or section chiefs, and other people involved in the preparation of reports, acquisition, storage, retrieval and distribution of these STINFO documents.

#### SCHOOL OF SYSTEMS AND LOGISTICS

#### Scientific and Technical Information(375)

##### Summary Outline

<u>SUBJECT MATTER</u>	<u>SUBJECT MATTER</u>	<u>SUBJECT MATTER</u>
Academic Orientation	Computers and ADPE	Systems for Information, Storage and Retrieval.
The Government and the Department of Defense STINFO Program	Foreign Technology Division Visit	Field Trip to Batelle Inst. Columbus, Ohio
The Air Force STINFO Program	The Scientific and Technical Liaison Offices	Titles, Abstracts, and Key Words
The STINFO Officer	Rights in Data	Seminar
Public Affairs Release	The Defense Documentation Center	Student Presentations
Security	Other Information Services	Course Evaluation
Export Control		
Panel	Library and Technical Information	

**SCHOOL OF SYSTEMS AND LOGISTICS**

**Scientific and Technical Information (375)**

**Day 7**

**0845 - 1145**

**Subject:** Relationship of the STINFO Offices with the  
Technical Library or Information Center

**Objective:** The objective of this lesson is for each student  
to know the acquisition, storage, and retrieval  
techniques.

**Desired Learning Outcomes:**

Each student should:

1. Know how STINFO is acquired
2. Know how he can assist in the acquisition process.
3. Know what problems are encountered in the storage  
of STINFO.
4. Know what action has been taken to alleviate the  
problem.
5. Know the various micro forms of storage:
  - a. Micro film
  - b. Micro fiche
  - c. Micro dot
6. Know what problems are encountered in attempting  
to retrieve STINFO.
7. Know what attempts have been made to solve the  
retrieval problems.
8. Know how he might assist in the retrieval process.



9. Know future plans in each of the four areas:  
acquisition, storage, micro forms, retrieval.

**Student Preparation:**

**Read:** Selected portions of Becker, Joseph and Hayes, R.M.,  
Information Storage and Retrieval: Tools, Elements  
Theories, John Wiley and Sons, New York, 1963.

Miss Marie Koeker, who is a technical reports, or documents librarian, and I make the presentation jointly. I provide the subject back-ground and discuss the book and periodical resources for technical information; Marie handles the documents side of the picture. We do not endorse any single library because we want, if possible, to speak for all libraries. These students who represent most of the laboratories and organizations in the Air Force, and now other components of the DOD should return encouraged to use the local library resources whenever possible.

The composition of the classes has been a conglomerate of technical specialists, engineers, information types, administrators, administrative assistants, and a few librarians. Harry Cook, Ruby Porter, and John J. Nicolaus, Bureau of Ships were among them. The approach has been general, yet attempts were made to specialize when necessary.

The title of our three hour presentation is the "Relationship of the STINFO Officer with the Technical Library, or Information Center." The objective of this lesson is for each student to know and understand the means by which he can most effectively promote the STINFO program by utilizing the resources of his own organization's technical library. You will find this differs from the originally proposed outline.

The following topics are discussed:

- A. Why is the library indispensable to the STINFO program?
- B. History of special libraries and their growth.
- C. Information requirements of technical organizations and the research habits of technical personnel.
- D. Services and types of collections provided by special technical libraries and information centers.

D.

1. Books, technical reports, professional journals
2. Microimages, retrieval, and reproduction
3. Displayed are micro-readers and printers, PMIC

E. Future of the library.

F. Suggestions to the STINFO officer how to search the technical literature and how to organize his research activities.

G. Suggestions for improving library relations and library services which would in turn improve the effectiveness of the STINFO program. Here I shall elucidate. "How can the STINFO officer assist in making the library of his organization more effective in the STINFO program?" He should establish a close liaison with the library and librarian, assist the librarian to anticipate requirements, and to select pertinent materials for the library. He can also suggest index subject headings most relative to projects in progress for cataloging new materials. He can insist on greater recognition of the technical library and better support by management; cooperate in studies to improve library services which may include mechanical aids.

What are Miss Koeker and I actually attempting to get across?

1. We feel, as you do, that the technical library is an indispensable and integral part of the DOD scientific and technical information program. Besides awakening ourselves to the situation and improving library services, this is our chance also to indoctrinate at source. We are missionaries of a sort.
2. STINFO is taking subject specialists of varying degrees of interests and attempting to make quasi-librarians out of them. We are trying to bridge that gap with the type of presentation offered.

What is the question before the house?

Miss Koeker and I are attempting to represent to these students all the technical libraries of the DOD. For

this reason, we believe you should be informed and be given the opportunity to suggest what you think should be covered in such a presentation to the STINFO class; possible changes in type of class; or method of presentation.

Results of some of the critiques have come back to us.

1. This is the first "practical" presentation.
2. There should be more of library information and we would like to see some sample libraries with some of the activities discussed demonstrated.
3. Perhaps this presentation could be exploded into a workshop.

I firmly believe that three hours is too short a time to properly present any library picture. I have suggested a panel type morning session discussing research resources, library equipment and support, and an afternoon session actually using some of the sources and visiting libraries.

I also suggest that other DOD librarians should be invited to participate in this panel.

The question is open for discussion.

## THE ROLE OF LIBRARIES IN THE DEFENSE DEPARTMENT

By Kenneth Lowry

When General Lampert invited me to speak to you this evening, he suggested that my remarks should be directed to the role of the library in the technical information programs being developed in the Defense Establishment.

In view of the fact that several years have passed since I was part of the Defense organization, my first reaction was that perhaps someone else should speak to the subject.

On second thought, however, the role of a library -- any library -- is determined largely by the development of several enduring themes essential to successful library operation in any type of environment, whether it be governmental, industrial or academic. I thought it might be useful to discuss these themes with you this evening.

Before doing this, I would like to set the stage for my remarks by reviewing briefly some of the important changes in recent years which are vitally affecting both the library profession and the nature of library work as it is now evolving. I shall spare you the agony of listening once again to the disasters to be expected from the effects of what is popularly called the "information explosion."

If a Doomsday Book is to be written for librarians, it will be for other reasons.

### CHANGES AFFECTING THE ROLE OF LIBRARIES

There are of course many changes affecting the role of libraries and librarians. Several of these seem particularly significant in view of recent developments and I believe we must keep them in mind when we plan our library operations.

The first concerns a change in attitude in the minds of those who need library service. The theme of your Workshop is in itself indicative of this change; "The Library in the Defense Establishment: Mutual Obligations Towards Mission Accomplishment."

This change takes the library out of that class of human activity generally regarded as "good things." By this I mean such venerable and

revered American institutions as the home, the flag, clean living and Mothers's Day.

Brave indeed is the man who dares to speak against such fondly held institutions. And down through the years, libraries have been thought of much in this way, -- even by people who never go into a library.

All this is now changing and even though libraries may find it more difficult to get support on the basis of sentimentality, I'm certain they will be able to get even greater support on the basis of the practical values they offer in human enterprises.

A second change concerns the impact of new technologies on the role of libraries. We live in an age of accelerated scientific and technological progress. New discoveries and new applications of technical achievement come tumbling out of our reservoirs of intellect at such a fast clip that not one among us can usefully assimilate this progress as we should.

But of the whole spectrum of these accomplishments, we find segments of special usefulness for our specific purposes. The implications of these technical advances for libraries are at once a challenge and a stimulus to the library profession.

They also forecast a new type of library endeavor with a new mode of library operation. They provide as well, new dimensions for service that go far beyond those of the past.

A third change is evolving which places the librarian in a role quite different from that of previous years. Whereas he has traditionally acted as architect, builder and operator of information systems for others to use -- usually on the basis of historic frameworks of library administration -- he now must take more cognizance of the specialized and constantly changing requirements for information posed by library customers.

This is especially true for users of scientific and technical information as reflected in the Defense Establishment.

There are of course other changes at the play as well: (1) the trade-off between a quick response and a thorough response, (2) the choice between in-house library work and outside contracts, etc. These, however, are essentially changes in degree rather than direction.

## THE ROLE OF THE LIBRARY

Having noted several significant forces affecting the role of libraries, I'd like to speak more in detail on three aspects of library work which need emphasis. In general, they relate to (1) the management and business operations of libraries, (2) their technical operations and (3) the interaction required between libraries and their users. I hope my comments will be pertinent to the DOD environment even though they may reflect, to a degree, our Bell Laboratories experience.

## THE MANAGEMENT ROLE

As I mentioned earlier, the halcyon days when the library was thought of as a "good thing" are pretty much a thing of the past.

And for this, we should be grateful. A paternalistic attitude toward libraries carried with it mixed blessings for all concerned. I recall a story my father like to tell when he was a clergyman trying to stimulate more generous contributions from his congregation ...

### --- Church Roof Story ---\*

Any library that is worth its salt must of course conduct its program in a manner that inspires confidence in it as a well run business operation. Given this, it is not unreasonable to expect continued investment in the library by management.

I don't need to impress on this group the importance attached to good management by the present Secretary of Defense. If some of you have not as yet felt the sting of his rapier against inefficiency, I hope you get things in shape before it's your turn to be inspected.

What most libraries need is what all successful business operations have. By that, I mean well-defined goals, an understanding of market requirements, and the resources to support a viable operation. On top of these needs there must be a librarian with enough ability, perception, and guts to run the business.

Now these are basic requirements, but in addition there is a whole store of proven management techniques which need to be employed by libraries. How many libraries are equipped to conduct systems studies, procedural analyses and cost studies? How many libraries have good training programs? In fact, how many librarians even prepare their own budget? Let's be more specific. How many of you in this room are engaged in such activities? My guess is that the number is quite low.

What has this to do with the role of libraries? Quite a lot in terms of your Workshop theme. If we are talking about "Mutual Obligations toward Mission Accomplishment," we are certainly talking about the library obligation to provide good operational efficiency. Operational efficiency doesn't just happen. It is accomplished by knowing what techniques are available and putting them to use. I believe Mr. McNamara does this on a very broad scale. If libraries and librarians fail to act on their own volition, someone else will act for them.

I'd like to demonstrate this from an experience I had some years ago in the Air Force.

--- ARDC Story ---\*

#### THE TECHNICAL ROLE

Earlier I indicated that more emphasis was required on the technical role of libraries to gain improvements. By this I mean technical operations in a broad sense and not just the technical processing of materials received by libraries.

The technological advances of recent years permit libraries to improve and extend their potential in many new and useful ways. Many applications are already in effect or planned for the DOD information program. I believe however, that most of this innovation is being spearheaded by non-librarians. To the degree that this is true, librarians have already lost the initiative, and some of the control of their library function.

As unreconstructed librarians of the old school, -- if that is the role you choose for yourself -- I can assure you that this trend will continue. No one will disturb you.

What is the technical role which librarians should play in the scheme of things to come? How do non-technical librarians gear up for the changes thrust upon them by technology? Will all librarians need to be computer experts?

Let's answer the last question first. The answer is no. But it's not an unqualified no. I think a familiar analogy will show why.

Not all librarians are catalogers. But all librarians do need to understand what cataloging offers to a library. They need to know what

it takes to get good cataloging.

It's about the same with computers and other equipment for libraries. The librarian of the future must learn about computers to know what they have to offer. And our experience shows it is not so difficult. To date, fourteen of our library staff have completed computer programming courses and several have written programs which are operating.

I'm certain that all these people are better equipped to understand the value of computers in our library work. And just as important is the fact that they also have a better appreciation of the limitations and constraints posed by computer use. Still, by no stretch of the imagination would we call them computer experts.

This type of staff orientation is essential and valuable, but libraries will need to go further if the full potential of new advances is to be realized.

A serious commitment to machine techniques is required. Libraries must accept computers as tools of work in the same way that they have accepted reproduction equipment and microfilm. They must have people on the staff who can analyze, design, program and debug computer systems. They must budget for computer operations.

Five years ago we made such a commitment in our own libraries and it has paid off handsomely. We are convinced that within another five years our libraries will be interconnected with an on-line, real time operating computer network which will make our present library services seem pedestrian in comparison.

#### THE USERS' ROLE

We have talked of the management role and of the technical role of libraries. Now as a final point we shall consider the role of the user in library operations.

You are all acquainted with the current studies being made under Walter Carlson's direction by DOD. I would like to consider the user on a somewhat different basis. Specifically, our thesis is that good library service will result only if the library user is involved in the design and implementation of library services. In our case we mean the technical staff.



There are many ways to achieve this, and I'd like to tell you of some we find useful.

1. BTL Library Committee.
2. Symposia on Information Problems.
3. Technical Specialists at Various Locations.
4. Format and Coverage of Announcement Bulletins.
5. Ad Hoc Thesaurus Committees.
6. Loan of Technical Staff to the Libraries.
7. Consultants for Reading Lists.
8. Feedback Loop on Tech. Report Value.
9. The Library as an Experimental Test Bed.
10. Technical Training for PR Staff.
11. Publicity on Library Activities.

In closing, I want to thank you for inviting me to your annual meeting. It has been a pleasure to see so many of my old friends again and to recall some of the stimulating experiences provided by ten years in the Defense Department information program.

And our special thanks go to our West Point friends for making it a very pleasant occasion.

\*At these points, the reader is urged to exercise his memory or his imagination. --ed.

ROUND TABLE DISCUSSION ON BIBLIOGRAPHIC TOOLS:  
THEIR USE AND POTENTIAL

By Nell E. Mitchell, chairman

Army War College curriculum is based upon international affairs in relation to military strategy. New classes are oriented in use of the library at which time key references, classified and unclassified, are explained.

Bibliographic resources used at Army War College Library:

1. Area Study Institutes - for bibliographies and materials in foreign languages.
2. Book Review Index and Gale Research Co. publications.
3. Department of State Foreign Area Research Center.
4. CIA & DIA biographic indexes.
5. JPRS for foreign translations.
6. Military Affairs Bibliography, prepared by Army Library.
7. Research centers - for area studies bibliographies.
8. Rand Corporation lists of publications.
9. Transition - quarterly review publication by Department of State.

Criticisms:

1. There is too much duplication of bibliographical compilation among the services at present.
2. Bibliographies issued as computer printouts are usually not practical and contain unuseable entries. A manual card catalog is still most practical bibliographical tool.

## ROUND TABLE DISCUSSION ON PROBLEMS FACING SERVICE LIBRARIANS

By LaVera Morgan, chairman

For this portion of the Workshop, the delegates to the Ninth Military Librarians' Workshop were divided into four groups according to Service, (1) Army, (2) Navy, (3) Air Force, and (4) other DOD. Prior to the meeting, questionnaires had been sent to each proposed delegate and the panel discussions were developed around the information submitted.

Information furnished by the Navy librarians indicated that our biggest problems are not new ones. Twenty-six Navy librarians and one Air Force visitor discussed, I. Acquisition and Procurement problems, II. Inadequate physical facilities, particularly space, and III. Inadequate staff.

### I. ACQUISITION AND PROCUREMENT PROBLEMS

A. Journal Subscriptions. A major problem with most DOD libraries is the renewal each year of journal subscriptions. The time spent on this annually by members of the staffs of libraries and supply offices is an extravagant use of personnel, but in most instances supply officers insist on the same obsolete procedures. The consensus is that some form of "Til Forbidden" arrangement would solve the majority of our problems relative to journal renewals. Supply people generally contend that Procurement Regulations will not permit this. It is felt that this is a simple matter of mis-interpretation of the regulations. Bill Jorgensen, NEL Librarian, has established an automatic invoicing service with publishers that in reality amounts to a "Til Forbidden" service. His library handles about 1,000 subscriptions in this way without imposing a heavy work load on the staff. They place two and three year subscriptions in all cases where the publisher will accept renewals for multiple years. At least two other libraries have been able to work out something similar for automatic invoicing with jobbers.

B. Procurement of Publications from Navy Supply Depot. Great difficulty is experienced in some libraries in obtaining publications from the Navy Supply Depot in Philadelphia. Some librarians have succeeded in working out a system with their supply officers to assign the library a block of numbers for ordering publications. In this way negotiations are direct by milstrip from the library to Navy Supply Depot; therefore, the publications come to the library eliminating the delay and confusion of going thru the Supply Officer. Librarians having difficulty with the present system should explore this possibility to correct that problem.

C. Procurement of Foreign Books. Most librarians are ordering their foreign books on BPO just as they order domestic books. Average delivery on these is six to eight weeks. There seems to be no solution to this problem unless we can talk our supply officers into appointing us (the librarians) as Procurement Officers for this purpose so that we can go direct to foreign publishers for material needed. In this way we could probably cut the waiting time in half.

The Navy Panel was fortunate in having with us the Chairman of the Federal Library Committee Task Force on Procurement Procedures in Federal Libraries. The purpose of this Task Force is to review and compile the laws and regulations related to procurement and disposal of library materials for Federal libraries; to review existing procurement practices; to recommend revisions in law, regulations, or practice which will facilitate the procurement of library materials and contribute to the economy and efficiency of Federal libraries. The job that Dorothy Deininger is doing as head of this Task Force gives us hope for the future solution to some of our problems in this field. Tabular information showing delay time on various categories of library material from date requested to date received was collected in advance of this meeting and given to Miss Deininger to use as appropriate with her study. The Federal Library Committee anticipates publishing a Procurement Handbook for the guidance of Federal librarians so we look forward optimistically to its publication.

## II. PHYSICAL FACILITIES

Most of us have uncomfortable, unattractive library quarters and there seems to be no solution to this for most of us in the foreseeable future. Our major problem with Facilities is inadequate space to house our collections and provide reader space for our patrons and work space for our staffs. It is impossible to give effective service to patrons and get maximum production from staff members in crowded, uncomfortable quarters.

Several suggestions were made as possible relief to the problem:

- a. Set up realistic weeding and discarding criteria and policy and maintain a vigorous and continuing weeding and discarding program.
- b. Keep accurate records of NET growth per annum. (Receipt of all types of material minus discards in each category.)
- c. Convert net growth of material into square feet.

- d. Estimate annual increment of shelving required to house expanding collection and provide management with statistical proof of growth rate as a basis for extending facilities.
- e. Arriving at realistic criteria for estimating space for readers and staff is difficult. It varies with the individual activity served. The experts don't always agree on the criteria to use in estimating staff space but a reasonable figure seems to be an average (not minimum) of 150 sq. ft. per staff member. Some will require only 75, others with workroom space requirements, e.g., binding, cataloging, etc., may need as much as 400 or 600 sq. ft.).
- f. Explore possibilities of use of microfiche as a space-saving device for storage of Documents. Two problems are paramount in doing this; funds for necessary equipment and education of patrons to use microfiche. Cathryn Lyon, Naval Weapons Laboratory, is using microfiche extensively without any apparent problems, and it is being used satisfactorily also at the Naval Ordnance Laboratory.
- g. When all hope is abandoned for additional space for the library to keep its collection in tact, explore the possibility of storage for "little used" material that cannot be discarded from the collection.

### III. STAFF

Problems in connection with staff result from: (a) Short supply of qualified librarians, (b) Competition with industrial and academic libraries, (c) Inadequate recruitment programs, (d) Inadequate Civil Service Commission Standards for recruitment and promotion of personnel, and (e) Inadequate number of positions assigned to the library.

#### Suggestions:

- a) Pursue possibilities and advantages of a career development program for the Navy similar to the Army's. It was the consensus that it would be advisable to check with Agnes Crawford, Director of the Army Library Program, a year from now to determine whether or not the Army program has proved to be feasible.

- b) Establish a central Register of librarians and vacancies.
- c) Each librarian should be a self-appointed recruitment officer to attract and interest young people in a library career.
- d) Maintain and provide management with statistical proof of the need for additional staff.

## ROUND TABLE DISCUSSION ON MILITARY HISTORY

By J. Thomas Russell, chairman

Following a survey of thirty landmark titles from the bibliography of military history, a brief examination was given to the study of military art & science at the U.S. Military Academy.

The formats of military source material were discussed: archives, artifact, contemporary account, official and professional civilian histories.

From ensuing discussions the following recommendations and opinions are offered:

1. Endorsement and encouragement are extended to the Air University Periodical Index effort with the desire that this valuable tool be broadened in scope to include more foreign titles.
2. All librarians are urged to compile bibliographies reflecting areas of subject strength. Notification of the existence and availability of these bibliographies should be sent to the editor of the Military Librarians Quarterly Bulletin for inclusion in the Bulletin.
3. A Wants and Exchange department is recommended for the Bulletin.
4. Inquiry should be made to determine disposition of library collections of installations scheduled to close. Official regulations should protect potentially valuable holdings from salvage. Shelf lists of these collections should be preserved possibly through some miniaturization process.
5. Inquiry should be made to establish whether or not a complete set of authority materials (e.g., numbered regulations) is retained for each of the military services. If not, steps should be taken to assure their preservation.
6. It is recommended that a panel on military history be included in the agenda of future Military Librarians Workshops.

## ROUND TABLE DISCUSSION ON PROBLEMS FACING AIR FORCE LIBRARIANS

By Robert W. Severance, chairman

About thirty Air Force librarians representing base, special, and academic libraries, and also representing staff positions at command and USAF level participated in the informal discussion. Also present were Mr. Edward K. Grimes of Headquarters USAF, Dr. James C. Shelburne of Headquarters Air University, Miss Marguerite Kennedy, Archivist, USAF Historical Office, and a navy librarian, Miss Helen De Vore.

The Chairman presented suggested topics submitted prior to the Workshop:

- (1) Delay in acquisition of materials;
- (2) The need for a positively stated program for special libraries, probably as part of AFR 212-1;
- (3) Problems of Air Force academic librarians;
- (4) Recruitment and retention of staff;
- (5) The need for a delineation between 1410 responsibilities and 1411 duties;
- (6) How payment is made for Xerox copies obtained from other libraries;
- (7) The question of establishment of a DOD library which could serve as a "national library" for the whole spectrum of military libraries;
- (8) The sort of criteria that could be set up for evaluation of the success of a special library;
- (9) The relationship of libraries to the STINFO program;
- (10) The guidelines that should be used to define limits of service for base libraries.

He pointed out that the Air Force is fortunate and unique among the services in that it has a Headquarters USAF staff officer to look out for



all types of libraries, Mr. Harry Cook. Mr. Cook participated in the discussions.

### Xerox

The Xerox question was discussed first. It was observed that there was a lack of standardization throughout the country in charging for Xerox copies of materials requested on interlibrary loan, some libraries exchanging copies free of charge and other charging for individual items. One solution presented to the group, where charges were made, involved the making of contracts with these institutions to cover billing costs for separate items, thus avoiding the necessity of keeping track of petty-cash transactions and consolidating many small bills.

### Delay in Acquisition of Materials

The question as to whether or not the Federal Library Committee might help to solve this complex and continuing problem was presented. It was explained that under existing law, which provides that acquisitions contracts be awarded to the lowest bidder, this is unlikely unless the law itself is changed. As it is, books are treated just like anything else the government buys, and the opportunity to bid on contracts must by law be available to small businesses. It was observed that it would be desirable to have special policies set up for procurement of library materials; in the meantime, under the present system, the chief problem is, and will continue to be, getting a responsible dealer who will give really satisfactory service. It was pointed out that one way of facilitating delivery of materials is by providing the contractor with franked labels, which makes separate shipments practical, and which can be provided under existing regulations.

Mr. Cook was asked if a plan for scheduling the submission of requisitions by command would result in a more stable flow of work through the central procurement office and quicker delivery. He replied that formal scheduling was not necessary because the present uncontrolled submission does not produce peak loads except during mail delays at Christmas and in connection with fiscal problems at the ends of quarters.

### Recruitment and Retention of 1410's and 1411's

A major difficulty lies in finding 1411's who under present standards are "dead-ended" at GS-7 no matter how many years of proficient service they achieve. The standards now under study probably will make provision for raising the top 1411 level to GS-11, which should do a great deal to ameliorate the situation of recruitment and retention of 1411's.

The new DOD program to take many military personnel out of non-military jobs was then discussed, in the knowledge that the Air Force library system will be affected by this program resulting in more civilian spaces under the 1411 series. It was pointed out that it is possible, if one's staff is sufficiently large, to create 1411's by starting people at 322's (clerk-typists) and converting them to 1411's after the qualification period. All agreed that the 1411 problem is critical, and may become even more so if civilianization is pushed, because there are so few applicants for 1411 jobs. Since average salary controls prevent upgrading jobs in most cases, the only alternative is to recruit people at the lower grade, and, hopefully, promote them to the higher grade later.

In the 1410 series, most jobs are at the GS-9 level; however, personnel directly out of library school can be appointed only at the GS-7 level, and it is necessary to downgrade these positions and try to get them upgraded later. The federal appropriations for libraries and higher education probably will increase recruiting problems in the federal government since civilian demands and competition will increase.

#### Manpower Evaluation

The difficulty in evaluating library workload factors lies in finding measurements that really express the amount and kind of work done. If this could be done staffs might be enlarged or at least stabilized, but most methods do not actually reflect the kind, amount, or quality of work done in libraries. The result unfortunately is liable to demonstrate only that one cannot have more people unless one can produce more, and one cannot produce more unless one has more people.

## MILITARY PERIODICALS MICROFILMING PROJECT

By Vernon Tate

[Distribution of microfilm copies of the "Air University" military periodicals will be made by the Library of Congress. The next Military Librarians Workshop should include discussion of problems surrounding the administration of periodical collections. Particular emphasis should be placed on possible remedial action regarding deterioration and on automated bibliographic control.]

### Air University Military Microfilms (1 April 1965)

<u>TITLE</u>	<u>VOLUMES</u>
<u>Aeronautics</u>	Vol 1-45, Aug 1939 - Mar 1962//
<u>Air Force</u>	Vol 1-46, Sep 21, 1918 - Dec 1963
<u>Air Force Times</u>	Vol 8, No 23 - Vol 24, Jan 17, 1948 - Feb 12, 1964 (Midwest Ed., Vol 15, No 41 - Vol 17, No 34, May 21, 1953 - Mar 30, 1957)
<u>Air Power</u>	Vol 1-7, 1953 - 1960 (Summer)//
<u>Air Power Historian</u>	Vol 1-10, Sep 1954 - 1963
<u>Air Rescue Service</u> <u>Information Letter</u>	Vol 5-9, Jan 1, 1951 - Sep 15, 1956//
<u>Air University Dispatch</u>	Vol 1-17, 1947 - Dec 1963
<u>Air University Quarterly</u> <u>Review</u>	Vol 1-13, 1947 - Summer 1962
<u>Air Weather Service</u> <u>Observer</u>	Vol 1-10, Nov 1954 - Dec 1963
<u>Aircraft Engineering</u>	Vol 1-35, Mar 1929 - Dec 1963

<u>TITLE</u>	<u>VOLUMES</u>
<u>Airman</u>	Vol 1-7, Aug 1957 - Dec 1963
<u>All Hands</u>	No. 339-563, Jun 1945 - Dec 1963
<u>Armed Forces Chemical Journal</u>	Vol 1-16, Oct 1946 - Dec 1962 (Vol 1-3, Oct 1946 - Apr 1948, <u>Chemical Corps Journal</u> )
<u>Armed Forces Management</u>	Vol 1-9, Oct 1954 - Sep 1963
<u>Army</u>	Vol 5-13, Aug 1954 - Jul 1963
<u>Army Information Digest</u>	Vol 1-17, 1946 - 1962
<u>Army-Navy-Air Force Journal</u>	Vol 1-78, 83-100, 1863/64-1940/41, Mar-Aug 1946, Sep 1950-Aug 25, 1962, Jun 1-Aug 31, 1963
<u>Army Times</u>	Vol 5, No 23-Vol 22, Jan 13, 1945 - Jul 28, 1962
<u>Aviation Age</u>	Vol 1-30, No 3, Dec 1943-Sep 1958 (Title changed to Space Aeronautics which continues numbering)
<u>Aviation Age Research and Development Technical Handbook see Space Aeronautics Research and Development Handbook</u>	
<u>Canadian Aviation</u>	Vol 1-36, 1928 - Dec 1963
<u>Field Artillery Journal</u>	Vol 1-40, 1911 - 1950//
<u>Flight-Aircraft, Spacecraft, Missiles (formerly Flight and Aircraft Engineer)</u>	Vol 1-78, Jan 1909 - Dec 30, 1960
<u>Flight Magazine</u>	Vol 1-52, Apr 1934 - Dec 1963
<u>Flying</u>	Vol 1-73, Aug 1927 - Dec 1963

<u>TITLE</u>	<u>VOLUMES</u>
<u>General Electric Forum</u> (formerly <u>General Electric</u> <u>Defense Quarterly</u> )	Vol 1-6, Apr 1958 - Dec 1963
<u>Infantry</u>	Vol 1-53, Dec 1931 - Oct/Dec 1963
<u>Infantry Journal</u>	Vol 1-66, Jul 1904 - Jul 1950//
<u>Interavia</u>	Vol 1-17, 1946 - Dec 1962
<u>The MATS Flyer</u>	Vol 1-9, Jun 1954 - Dec 1962
<u>Marine Corps Gazette</u>	Vol 1-47, Mar 1916 - Dec 1963
<u>Military Engineer</u>	Vol 1-53, 1909 - Dec 1961 (Vol 1-11, 1909-1919 as <u>Memoirs of Corps of Engineers</u> )
<u>Military Review</u>	Vol 1-43, Jan 1922 - Dec 1963
<u>Missiles and Rockets</u>	Vol 1-13, Oct 1956 - Dec 1963
<u>National Defense Trans- portation Journal</u>	Vol 1-17, Feb 1945 - Dec 1961
<u>Naval Aviation News</u>	Vol 1, Oct 1, 1919 - Dec 1963
<u>Navy Times</u>	Vol 1-12, Oct 20, 1951 - May 8, 1963
<u>Pegasus</u>	Jan 1943 - Dec 1957
<u>Roundel</u>	Vol 1-15, Nov 1948 - Dec 1963
<u>Signal</u>	Vol 1-17, Sep 1946 - Aug 1963
<u>Space Aeronautics</u>	Vol 30, No 4-40, Oct 1958 - Dec 1963
<u>Space Aeronautics</u> <u>Research and</u> <u>Development Handbook</u>	Vol 1-5, 1957/58 - 1961/62

U. S. Air Service

Vol 1-41, Feb 1919 - Dec 1956//

U. S. Naval Institute,  
Proceedings of

Vol 1-89, 1864 - Dec 1963

For information on procurement of microfilm copies of listed journals  
write: Chief, Photo-duplication Service, Library of Congress, Washington,  
D. C. 20540.

## ROUND TABLE DISCUSSION ON LIBRARY FACILITIES

By Egon Weiss, chairman

A slide presentation of the USMA Library Building program illustrated the various steps requisite toward developing plans for a new library building. Beginning with viewing the inadequacies of an old library structure, the USMA Librarian shared some experiences relevant to translating existing and future requirements into the formulation of a feasible building scheme. The importance of scrutinizing recent installations towards gaining perspectives was stressed as a prerequisite in developing the expertise required of the librarian. Important ancillary factors, such as a thorough knowledge of one's institution, architectural, and budgetary consideration were stressed.

During the discussion period, Mr. Robert Martin, Natick Laboratories, and Miss LaVera Morgan, USN Research Laboratory, discussed their preliminary building plans; special points such as site, lay-out, material, storage, and seating were emphasized.

A problem arises for technical libraries planning new facilities because of the existence of "ready-made" plans which are actually prototypes for special services-type libraries. These plans are singularly unsuited for libraries which house technical reports and documents; the planning for technical and research libraries, therefore, will require special plans which should primarily relate to the utility of the individual installation.

Mr. Severance, Director, Air University Libraries, emphasized the value of windowless libraries. He pointed to the detriment of "glass" to operations, inhibiting the flexibility of a library. He minimized the advantages of "view" by stating that library patrons have no particular need to gaze out while working in a library.

Participants agreed that the importance of physical access, namely, placing the library in the center of activities, is a significant consideration in enhancing the potential role which a new library is to play.

## LIBRARIES AND THE NATIONAL CENTER FOR EDUCATIONAL STATISTICS

By Joel Williams

[Library statistics on a national level will be assembled by this new arm of the Office of Education. The Center's purpose is to gather information basic to the administration of the several education acts. A conference on a national program for library statistics is anticipated to be convened in April or May 1966. The College and University Libraries survey has been extended to include some 50-70 military educational institutions not formerly queried. The Special Libraries Serving the Federal Government survey will be expanded to cover automation and data processing activities; these latter questionnaires should be mailed in February 1966.]



## THE FEDERAL LIBRARY COMMITTEE

By R. A. Winnacker

My presence on this program is an indication that -- organizationally speaking -- all is not beer and skittles in the Defense Library set-up. When Mr. Mumford last January sent out his appeal for a Defense representative on the Federal Library Committee -- one who could speak for the Department as a whole -- we looked high and low and the axe finally fell on the Historian, OSD. I imagine that we worked on the assumption -- justified or not -- that he at least was a user of libraries.

To remedy the professional shortcomings in the Defense representation on the Committee, we established a group of Defense librarians -- appointed by their respective Secretaries -- with whom I meet periodically and to whom I tell the innermost secrets of the Federal Library Committee. From my point of view, this has been a pleasant association and an educational experience. I gather from my colleagues that they have not suffered too much from my lack of professional librarianship. Anyway, they can correct the record later, if they care to.

As for the Federal Library Committee, I thought it best to provide you with copies of its first Newsletter as a substitute for any detailed discussion by me of the origins of the Committee, of its hopes and ambitions. You may find of particular interest Paul Howard's discussion of what the Committee should do and the section on the task forces that the Committee has established to look into particular problems. Since the Newsletter is available, I can devote the time allotted to me to the question that, I assume, you are particularly interested in; namely "What does the Federal Library Committee mean to the individual military librarian?" I am sorry to state that there is no clear answer to this question at the present time. Let me give you, for better or for worse, the views of a non-librarian on this subject.

On the plus side, there should be mentioned that the mere existence of the Committee is a good thing. Librarians have become visible on a Government-wide level. This is good in itself and good for morale. The Committee members could make a collective noise or even strike a blow for the proper recognition of the valuable services rendered day-in and day-out. It is true that the Committee can not act in its own name, but it can recommend, and collective recommendations carry more weight than a single voice in the wilderness.

Also on the plus side, I believe, is the fact that the establishment of the Committee forced the Department of Defense to provide a Department-wide focal point for library activities -- even if they had to draft an historian to participate in this enterprise. Still such a focal point does exist now. I will come back to this matter later.

The big unknown question is what the Committee itself intends to do with itself. After attending seven meetings of this group, it is my impression that the Committee is Washington-oriented, big library conscious, and overwhelmed by the problems that the information explosion and automation are creating for the library profession. It remains to be seen whether or not it will become a spokesman for the average librarian in the Federal Government. There is greater hope that this function might be served by the task forces, most of which deal with real bread-and-butter questions. But even here, it remains to be seen how successful they will be in obtaining agreement on the concrete steps to be taken and, then, in getting their recommendations adopted.

I probably should be more generous in my comments, for the problems that confront the Committee are very similar to those that we face in the Department of Defense. First and foremost, there is the great variety of Library operations in the Federal Government. How can you make significant and concrete recommendations at one and the same time for the Library of Congress, the National Libraries of Medicine and Agriculture, and the libraries in the Veterans Administration, the Post Office Department, the Civil Service Commission, the Atomic Energy Commission -- to mention only a few?

We encounter the same dilemma in the Department of Defense. We have in Washington the central libraries of the Army and Navy and such specialized libraries as those of the Engineers and the JAGs. We have all over the United States the military school libraries in JCS controlled colleges (NWC, ICAF, AFSC in Norfolk), in service colleges at Carlisle, Newport, Quantico and Maxwell, in the military academies, and in hundreds of training establishments (some of them with high caliber libraries, like the one at Leavenworth). We have post and installations libraries, hundreds of them in each Service, performing quasi-public-library functions both at home and abroad. We have the Department Schools libraries abroad -- a breed all its own. And then we have the scientific and technical libraries, and they are also in a class by themselves, as their future is being reviewed and analyzed over and over again by insiders and outsiders. It looks as if their problems are becoming manageable under the guidance and prodding of COSATI and, more specifically in the Department of Defense, Mr. Carlson of our office of Research and Engineering.

How can you have common rules or programs for such a variety of activities? Each group has different problems, different bosses, different budget controls. In some cases supervision is fairly centralized, while in others supervision is primarily exercised on the local level and increased centralization would undermine traditional command responsibilities. As for the librarians themselves, those who are confronted with grave difficulties are inclined to seek salvation in a more centralized organization, while those who manage to do fairly well at the present time fear the additional controls that a centralized set-up would entail.

Despite such difficulties, however, I gather that libraries in the Department of Defense are not in an unusually sorry mess at the present time. Library activities are humming and growing, and all of you manage to keep busy -- too busy, in fact, for the taste of some of you. This increasing workload, however, has added new problems to the old ones -- as you undoubtedly know better than I. Since library scuttlebutt appears to follow the guidelines used by newspaper editors: "Only bad news deserves a headline," I have also become acquainted with your problems. Outstanding among them appear to be:

The organizational placement of the library function in the administrative structure.

The adequate funding of library activities in line with constantly expanding functions. And

The proper recognition of library services by the powers-that-be -- usually referred to as the nasty administrators.

There is no doubt that these problems exist, and they are not diminished by the fact that they are shared in one way or another by practically every professional group in the Government. While this fact should remind us that there are probably no permanent solutions to these problems, a realistic and feasible long-term effort is needed to keep these problems under control.

This brings me to the main point that I would like to make this morning. The Federal Library Committee may or may not be of any help to the average librarian -- this remains to be seen -- but, in the meantime, there are problems that we can, and probably should, solve ourselves. This annual workshop of military librarians has been established, in part at least, to bring your problems to the surface and find solutions. I suggest that you look to the Defense Library Group as an around-the-year operation that might be helpful in searching for ways to implement

sensible recommendations and new courses of action. We are not looking for work -- far from it, for we carry our assignment as additional duty -- but it might be good to know that there is a place where and through which Defense library problems can be considered at any time on a Department-wide basis.

If you are inclined to follow this road, I suggest that you send your recommendations -- individual ones as well as collective ones -- either to me directly or to your colleagues of long standing -- Paul Burnette and Agnes Crawford of the Army, Dorothy Deininger and Bart Greenwood of the Navy, and Harry Cook of the Air Force.

There are also other ways to make your presence felt. As I mentioned earlier, it is my hope that real bread-and-butter questions will be discussed by the task forces of the Committee. We have Defense representatives on each of the 6 groups established, which are listed on p. 16 of the Newsletter.

Taking a chance on making these representatives mad at me from here to eternity, let it be known that: You may pour out all your worries concerning library acquisitions to Logan Cowgill or George Stansfield. For automation problems you should turn to Fred Coxton, who has as his alternates John Nicholas and Logan Cowgill. On the Inter-Library Loan task force we have Paul Burnette. Any ideas that you might have concerning the very important subject of library standards, you should mention to Charles Knapp. All your frustrations concerning procurement procedures you should pour out to Dorothy Deininger. And your inability to hire properly trained personnel you should explain to Agnes Crawford, who sits on the Recruiting task force.

Some of the problems mentioned you will discuss at this meeting, as well as others, such as the new Civil Service Standards for Librarians. Whatever the result of your discussions, at least you know that there are now additional avenues in existence for bringing your problems to the attention of the powers-that-be. In this enterprise, we stand ready to serve at any time.

## ATTENDEES

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